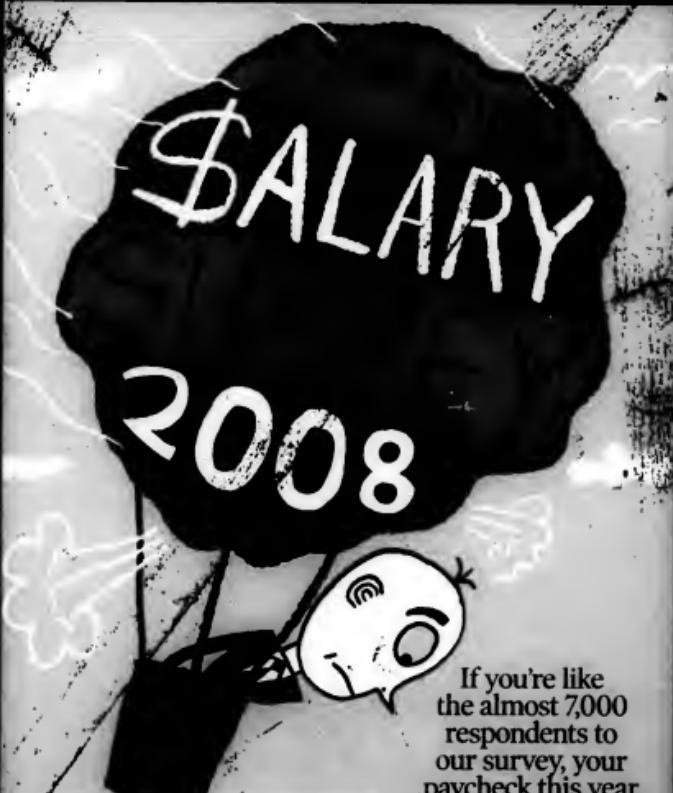




THE GRILL. Ning CEO Gina Bianchini talks about social networking, privacy and the rise of women at vibrant IT start-ups. **PAGE 18**

COMPUTERWORLD



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If you're like the almost 7,000 respondents to our survey, your paycheck this year has been flattened and your bonus obliterated.

Learn how some
IT workers are
coping. **PAGE 24**

Yahoo says it's open to selling itself to Microsoft after its ad deal with Google falls through.

New tools emerge to help analyze data gathered from Web 2.0 apps.

There were no major e-voting snafus last week. But it's too soon to declare victory for the systems.

Windows 7 will be a major step up from Vista, but that's not saying much.

Don Tennant and Frank Hayes link the election to IT in surprising ways.

When it comes to employee engagement, IT pros are at the bottom of the pack.

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SALARY SURVEY 2008

ONLINE

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ILLUSTRATIONS BY NATE WILLIAMS

This Week Online

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www.computerworld.com/more.



There's Nothing Easy About Letting Apple Into the Enterprise

Even Mac veterans say that Apple doesn't always act like other technology partners and that mixing Macs into an enterprise environment takes time and research.

SALARY SURVEY 2008

Smart Salary Tool

Are you keeping up with what your peers are making? Search by title and region.

Why Netbooks Will Soon Cost \$99

OPINION: The era when subnotebooks are subsidized like cell phones is here - almost, says Mike Elgan.

Blog Spotlight

No ID Required: Inviting Voter Fraud



Forget e-voting, data security and a mess of other technological worries. We need to implement the basic step of verifying voter identity, Computerworld Editorial Director Don Tenant writes in his blog.

More Reasons Why Windows 7 Will Kill Linux



Linux has proved to be a viable alternative for users who haven't embraced Windows Vista. But Microsoft's next operating system, Windows 7, may put a nail in Linux's coffin, predicts Preston Gralla.

Microsoft's System Center Virtual Machine Manager

REVIEW: The software features a wide scope of virtual platform support, performance and resource optimization - for both Microsoft and VMware infrastructures.

Commission's Effort to Make Campaign Data Accessible Involves Complex IT Systems

Q&A: For the Federal Election Commission, enforcing campaign finance laws and making financing data publicly accessible requires a vast server farm, multiple levels of databases and a variety of security tools.

SHARK BAIT

A college instructor offers himself as a personal reference to students who are just embarking on their careers. But it comes with strings attached.

Do you spend more time with computers than you do with people - especially those of the opposite sex? If so, this snarky video may be just the advice you need.

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■ EDITOR'S NOTE

Don Tennant



Hope Rising

LAST TUESDAY NIGHT, I was standing in the middle of a huge crowd in the heart of Times Square in New York. We were following the election results on the towering screens set up by the various TV networks, and there was an electricity pulsating through the crowd that made New Year's Eve seem sleepy in comparison.

No garish ball of lights was dropping. Instead, a virtual ball of hope was rising.

At the moment when the screens flashed the numbers that meant our country had elected its first African-American president, I found myself immersed in a wave of elation that was unlike anything I'd ever experienced. People of all races cried. Strangers of different races hugged and posed for photographs with each other. Inching their way down Broadway, taxi drivers of all colors extended their arms out their windows to slap hands of all colors. People gazed at the streaming news banners for which Times Square is so well known, their thoughts no doubt spinning at the magnitude of what they read.

My thoughts turned to my three grandchildren and a fourth on the way whose father is of African descent. That they share a heritage with our next president is something I'm certain they'll embrace with pride as they grow up.

I'm sure many others of my generation in the crowd shared my thoughts about how far our country has come in our lifetimes. Reflecting on how far we have yet to go could wait, if only for a few hours. The moment was a long time in coming, and it warranted the pause.

Now, the pause must give way to pondering what is yet to be achieved. The agenda is a long one, and for those of us who follow the IT profession, there's no more glaring item than one highlighted by the results of *Computerworld's* 2008 IT Salary Survey.

When I wrote about the survey last year, I noted that African-Americans were underrepresented in the IT profession, with only a 3% showing, and that their compensation

was significantly lower than that of their white counterparts. So how far have we come in a year?

Unfortunately, we don't seem to have budged. The 3% figure is unchanged, and if anything, the compensation gap is even wider. Last year, African-American IT workers made just 86.4 cents for every dollar white IT workers made (average total compensation of \$78,582, compared with \$90,901). This year, it was 85.9 cents (\$80,733 vs. \$93,977).

Other statistics are equally troubling. Whites saw a 3.4% compensation increase from last year, compared with 2.7% for African-Americans, the lowest increase for any ethnicity in the survey. Less than half the African-Americans (49.1%) reported that they were satisfied or very satisfied with their compensation, compared with 61.1% for whites, the highest satisfaction level of any ethnic group covered.

While the gender wage gap is typically explained away by the arguments that

■ In Times Square, no garish ball of lights was dropping. Instead, a virtual ball of hope was rising.

women tend to interrupt their careers for child-rearing and that they're not as likely as men to accept things like relocations to advance their careers, it's far more difficult to rationalize the race wage gap. I wrote last year that one consultant attributed the gap to "intangibles" — subjective factors that determine where in the compensation range an individual falls. That the building of trusted relationships that enables people to reach the higher end of the subjective range apparently hasn't strengthened in the past year is disappointing.

Yet one heartening statistic came from the survey as well. When asked how satisfied they were with their decision to pursue an IT career, 89.3% of African-Americans said they were satisfied or very satisfied. That's the highest percentage of support for the career path voiced by any ethnicity, including whites, at 84.5%.

Perhaps that says something about perseverance under difficult circumstances, which made what happened last Tuesday night possible in the first place. That ball of hope is a remarkable thing. May it long continue to rise. ■

Don Tennant is editorial director of *Computerworld* and InfoWorld. Contact him at don_tennant@computerworld.com, and visit his blog at <http://blogs.computerworld.com/tennant>.

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■ ONLINE CHATTER

RESPONSES TO:

Windows 7: Microsoft's Secret Weapon Against Google

Oct. 27, 2008

Aw, Windows 7 may ruin my business plan for a franchised Vista service organization that pays house calls and improves Vista by deleting apps and installing Word 6.0 — named, naturally, Garbage Out.

■ Submitted by: Jaynicks

CEO Steve Ballmer thinks any of Microsoft's previously easy-to-get apps are actually WORTH going to the trouble of downloading? Did he get this idea from Jerry Seinfeld, or what?

■ Submitted by: Anonymous

I only hope a stripped-down OS brings a stripped-down price.

■ Submitted by: Anonymous

A stripped-down version of Vista ... download for free ... repositories ... sounds like they are copying Linux ... welcome to the future, Microsoft!

■ Submitted by: Anonymous

RESPONSE TO:

What 'Suits' Need To Know About IT

Oct. 27, 2008

Unfortunately, most senior executives rise through the sales and marketing parts of an organization. Modern marketing types have learned some digital smarts — your basic Digital Neanderthal. Sales types are still the digital equivalent to "homo erectus." While they can cooperate, plan and complete complex projects to sell products, their personal computer is only as smart as the programs they can find and, like a toaster, it "just has to work."

They do not have the background, the interest, nor the desire to understand how computers, software and networks interact. This is unfortunate, as the recent financial

meltdown attests — the "rocket scientists" in the financial firms' marketing departments did not understand the limits of their software models, and the executives were not savvy enough to ask the right questions. For an organization to thrive in this digital age, the requirements for senior executives must be broadened to include a significant knowledge and understanding of technology and the willingness to continually learn as the technology evolves.

■ Submitted by: Anonymous

RESPONSE TO:

Customer Dis-service

Oct. 27, 2008

In my view, bad customer service is always due to poor training in (1) technology

(2) customer-relations handling

Most of the time, (2) is not the issue. But (1) is a different story.

My guess is that Bart Perkins' experience stems from the techs at the company he bought his phone from not being familiar with all its features. This means that there's no one to escalate to, because no one knows the product well enough. I've seen this all too often with computer software vendors.

Many times, "consulting engineers" will be brought in to design a product, and if they leave before the tech doc is done, or if the tech doc is done by another team of tech writers who lack the technical ability to understand what they're documenting, then you have things like this happen.

I think that the only way this will end is for such companies to be publicly embarrassed by being placed on an "Angie's List" for technology, so that people can post when they receive bad service, and others can research who provides good service and who doesn't, and buy accordingly.

■ Submitted by: Anonymous

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INTERNET

Yahoo CEO Yang Reaches Out to Microsoft's Ballmer

YAHOO INC. CEO Jerry Yang publicly turned to Microsoft Corp. for help last week, just hours after Google Inc. walked away from a proposed search advertising partnership with his company.

Speaking at the Web 2.0 Summit in San Francisco, Yang said that Microsoft CEO Steve Ballmer can just say the word and he will begin negotiating the sale of his company. "I would say that the best thing for Microsoft to do is to buy Yahoo," he said.

In fact, Yang said Yahoo is

willing to sell itself for less than the Microsoft offer it rejected last spring.

Yang's move was prompted by Google's announcement that it's abandoning plans to run Google advertisements on Yahoo search results pages. Google said that constant wrangling with advertising groups and government regulators over whether the deal violated antitrust laws was not in the company's best interests.

When plans for the partnership were announced in June, Yahoo projected that the deal would generate

The best thing for Microsoft to do is to buy Yahoo.

\$250 million to \$450 million during the first year, and up to \$800 million annually thereafter.

The financial boost would have come at a good time for Yahoo, which is now cutting costs by laying off 10% of its workforce.

Some industry observers maintain that Google's decision gives Yahoo no choice but to sell itself to a company like Microsoft or AOL LLC.

"The company was very much relying on the Google deal to stabilize its financial condition," said Mike Masnick, president and CEO of IT research firm Floor64 Inc., on Floor64's Techdirt blog site. "Without that, Yahoo is in trouble."

However, David Card, an analyst at Forrester Research Inc., contended that Yahoo can still survive — and perhaps thrive — on its own. He said Yahoo has created a large and loyal audience through the years and has "done a pretty good job of selling advertising."

Noting that the company has also successfully added some Web 2.0 technologies that key competitors lack, Card said, "I don't think they need to be that competitive in search to be a successful online media company."

— Heather Haverstein, with
Juan Carlos Perez
of the IDG News Service

THE WEEK AHEAD

MONDAY: The Society for Information Management opens its annual SIMposium in Lake Buena Vista, Fla. And the Microsoft-focused DevConnections begins in Las Vegas.

TUESDAY: Microsoft plans to issue two security fixes — one rated "critical" — as part of its regular monthly patch release.

SUNDAY: Software vendor CA kicks off its CA World 2008 user conference in Las Vegas with an evening keynote by CEO John Swainson. Regular sessions start the next day.



SECURITY

ActiveX Poses Threat to Vista, Microsoft Says

MICROSOFT CORP.'S Windows Vista operating system is far better protected from attack code than Windows XP is. However, in a report issued last week, the company said that its own ActiveX plug-in technology is a significant threat to Vista.

The latest of the company's twice-yearly security intelligence reports said that half of the top 10 browser-based attacks against Windows XP over the past six months exploited vulnerabilities in Microsoft's own software.

None of the top 10 attacks against Vista systems did so, the report said. Instead, most of those attacks targeted bugs in third-party Internet Explorer add-ins created using ActiveX controls.

George Stathakopoulos, general manager of Microsoft's product security and security engineering group, said the results show that

the company has improved new-product security.

"Our security development processes do pay off," he said, though he acknowledged that "ecosystem-wide, we still have a problem."

— GREGORY KEIZER

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■ NEWS DIGEST

OUTSOURCING

ACS Shifting 'Higher-Level' IT Jobs to Offshore Sites

AFFILIATED Computer Services Inc. plans to boost the capabilities of its offshore outsourcing and IT services operations — and reduce its costs — by moving some higher-level technical jobs to other countries.

ACS officials said on an Oct. 30 financial results conference call that they intend to shift 4,200 jobs outside the U.S. during the fiscal year that began in July. That would give the Dallas-based IT services firm more than 20,000 offshore employees, amounting to nearly 35% of its 63,000-person workforce.

And to ensure that the new transfers have "a greater financial impact" than previous offshoring moves did, a larger-than-usual percentage of the affected positions will be "more complex, higher-paying jobs," including ones in application development and project management, ACS President and CEO Lynn

Blodgett said.

The expected savings will leave ACS with more money to invest in areas such as sales and development of new service offerings, Blodgett said. That's especially important with the economy in a state of turmoil, he added.

"This is the right thing to do and the right time to do it," Blodgett said. "This investment will make us stronger, not only during this economic storm, but for years to come."

Over the past few years, ACS has been gradually

BY THE NUMBERS

■ About 22% of the ACS workforce was located offshore as of mid-2006. That figure will be nearly 35% by next June.

■ Severance costs related to the offshoring program are expected to total up to \$16 million this quarter.

■ ACS said transition expenses could add another \$9 million in upfront costs.

shifting jobs to offshore and near-shore facilities. The company's new plan includes opening more service delivery centers in India and adding workers in the Philippines, Mexico, Jamaica and Guatemala.

Ron Hira, an assistant professor of public policy at the Rochester Institute of Technology and co-author of *Outsourcing America*, said that high-level IT jobs "are just as vulnerable" to offshoring as lower-level ones are. Every IT services firm, big or small, is shifting more-advanced technology jobs offshore, he said.

An ACS spokesman said it's too early to know whether the new offshoring moves will lead to layoffs of U.S. workers. The firm's business continues to expand, he pointed out.

But a slide in the conference call presentation indicated that ACS is projecting \$38 million to \$42 million in "severance/transition" expenses as a result of the increased offshore activity. According to the slide, as much as \$25 million of that total is expected to be spent during the company's current fiscal second quarter.

— Patrick Thibodeau

Short Takes

has launched several cost-cutting measures, including an enhanced severance package for employees who leave voluntarily. It blamed "economic uncertainty" for the moves, which also include a short-term hiring freeze and reductions in the use of contractors and temporary workers.

has laid off an unspecified number of employees in what an executive called a "modest and prudent" reaction to the poor global economy. It employs 3,000 people worldwide.

confirmed that its next-generation Core i7 processors, code-named Nehalem, will be unveiled on Nov. 17. The high-end desktop chips are an upgrade to the Core 2 chip family.

and jointly launched the Open Document Format Toolkit Union, an open-source project aimed at helping developers use ODF. Sun contributed an initial set of code for an API, while IBM will donate technology later.

MANAGEMENT

Wipro Delays Plan to Open Software Center in Atlanta

OFFSHORE outsourcing vendor Wipro Ltd. is delaying its plan to open a software development center in Atlanta, a decision that the India-based company said was driven by the global economic downturn.

Wipro announced in July 2007 that it planned to set up the Atlanta facility in order to increase its U.S. workforce and

boost its ability to do onshore application development and other IT work for U.S. customers. At the time, Wipro officials said they expected the development center to employ up to 1,000 people within three years.

The plan also called for the outsourcing to add three more U.S.-based software centers at unspecified later dates.

But in a statement last week, Wipro said that the economic problems and stock-market turmoil have made it harder to get the attention of potential customers. "We are not shying away from what we plan to do in Atlanta, but it is taking more time than expected given this [economic] scenario," the company said.

Wipro recently reported a 30% revenue increase year

over year for the third quarter. But its profits grew only 1.3%, and Wipro said its short-term outlook is cautious because of the global economic strains.

Consulting firm Technology Partners International Inc. said the third quarter is historically a weak one for outsourcing deals. But this year's was the softest that TPI has seen in 10 years.

— JOHN RIGERIO,
IDG NEWS SERVICE

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■ NEWS DIGEST

ENTERPRISE APPLICATIONS

SAP Not Wavering on Pricier Support Plan

SAP AG last week offered a small olive branch to angry users by sweetening the features of its mandatory Enterprise Support program and extending the regular maintenance period for its core applications from five to seven years.

But SAP isn't making any concessions on the higher costs that customers will face when they start being moved to Enterprise Support in January. Nor does the software vendor appear to be second-guessing its July decision to shift all users to the new program.

"What I learned is, we could have communicated it a little bit better. That's the only thing," SAP co-CEO Henning Kagermann said when asked about Enterprise Support during a session at a Goldman Sachs conference in New York.

But in a survey conducted recently by the SAP User Group Executive Network, 90% of the respondents said they didn't fully understand the features of Enterprise Support or its potential cost benefits, according to a joint announcement by SAP and SUGEN.

The vendor and SUGEN, which includes representatives from 31 SAP user groups worldwide, said they plan to work together to de-

We need a joint effort to overcome the differences between SAP and its customer base.

We could have communicated it a little bit better. That's the only thing.

By SETH HERMAN
IDG News Service

velop a set of performance metrics for assessing the value of Enterprise Support.

"We need a joint effort to overcome the differences between SAP and its customer base [in order] to ensure value is delivered for the increased maintenance fees," SUGEN Vice Chairman Matthias Herzog said in a statement.

—Chris Kanaracus,
IDG News Service

BETWEEN THE LINES

By John Klossner



became the latest IT vendor to announce a hiring freeze. Through the freeze and other steps, Cisco hopes to cut expenses by \$1 billion in its current fiscal quarter

The **U.S. House** voted to allow new broadband wire-

less devices to operate in unused television spectrum, or "white spaces."

introduced its Windows XP Tablet PC Edition software, which lets users input data by writing on tablet systems' LCD screens with digital pens.

Global Dispatches

Economy Forces Nokia to Cut 600 Jobs

ESP00, Finland — Nokia Corp. last week said it planned to lay off about 600 employees, blaming a weakening worldwide economy and a slow of new competitors.

The total includes about 100 workers in Finland and 130 who work on long-term research projects at the site Nokia Research Centers around the world.

The announcement came less than a month after Nokia reported that third-quarter earnings fell 29% and sales declined by 5%. The company also said it lost market share

during the quarter.

The layoff will take effect on Jan. 1, the company said. Nancy Gehring,
IDG News Service

Intel, Taiwan Plan To Open Moblin OS Research Center

TAIPEI — Intel Corp. and the Taiwan government last month announced plans to open a development center here that will focus on upgrading the Moblin operating system.

Moblin, designed by Intel to run small devices based on its Atom processor, includes a Linux kernel, a user interface, a browser and developer tools.

Intel said it plans to use the new facility to help Taiwanese device makers such as Acer Inc. and Asustek Computer Inc. make better use of Moblin.

The center will open next month, said Yin Chih-ming,

Taiwan's minister of economic affairs.

Dan Hyatt,
IDG News Service

BRIEFLY NOTED

Microsoft Corp. last week marked the 10th anniversary of Microsoft Research Asia, the company's largest research-and-development facility outside of the U.S., during its annual Innovation Day in Beijing. Managing Director Hsiao-Wuen Hon said the facility focuses on multimedia technology, search tools and online advertising techniques. New projects include research on cloud computing and hosted software.

Steven Schwankert,
IDG News Service

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Companies Looking for New Ways To Measure Web 2.0

IT managers are looking to use data studied by new analytics tools to improve customer loyalty.

By Heather Hovenstein

LARGE companies are slowly starting to install upgraded Web analytics tools to gather and scrutinize data from their growing numbers of second-generation online applications.

For years, enterprises have used traditional Web-analytics tools to simply measure page views and keep track of traffic on corporate Web sites.

Now, with the spread of corporate-sponsored Web 2.0 applications such as blogs, chat rooms and online communities, forward-thinking IT managers are starting to install tools that can measure and analyze activities there.

Some executives say that companies could use the data from these sites to significantly improve customer relations and even measure the buzz surrounding their brands.

Kimberly-Clark Corp. first created an online community — Scott Common Sense — for users and potential users of its Scott personal care products in 2004. Earlier this year, the consumer products company began taking steps to analyze the data compiled by the Web 2.0 application.

The community has evolved to offer information such as personal finance and healthy living advice and enables members to interact with one another. This year, the company added information about Scott products for the first time.

Kimberly-Clark launched its effort to analyze the Web 2.0 data with the installation of a beta version of a so-called marketing warehouse from Portland,

Ore.-based WebTrends Inc.

The WebTrends Marketing Warehouse operates as an enterprise-scale hub for online and offline data storage and analysis and can integrate the Web data with other corporate information sources, applications and systems, said Dirk Hoerter, team leader for relationship marketing at Irving, Texas-based Kimberly-Clark.

One key early finding: The more a user partici-

pates in the community, the more loyal he is to the company's products, Hoerter noted.

Kimberly-Clark is now using the warehouse to link data compiled on its community site with customer profile information, helping it identify its most loyal customers and determine which content they view or tools they use. Thus, the company can serve up the content most sought by the site's users, Hoerter added.

Over the long term, Kimberly-Clark hopes to use the analytics tool to determine the interests of specific segments of users, such as those whose children are going through the toilet-training process. In this case, Web 2.0 analysis tools could find groups of users whose children are ready to move from Huggies diapers to Pull-Ups — both of which are Kimberly-Clark brands.

Kimberly-Clark will probably add more online communities, and the ability to analyze their data, for its other brands.

The WebTrends warehouse became generally available late last month.

John Lovett, an analyst at New York-based JupiterResearch LLC, said that

companies like Kimberly-Clark can't afford to ignore information that may be spreading through the Web 2.0 landscape of company-hosted blogs and social networks.

"The rise of user-generated content has really forced brands to [seek a way] to monitor what consumers are saying about them across all the pages of the Web," Lovett said. "The ability to measure those comments and what is happening with the brand has become an important part of ensuring the integrity of the brand."

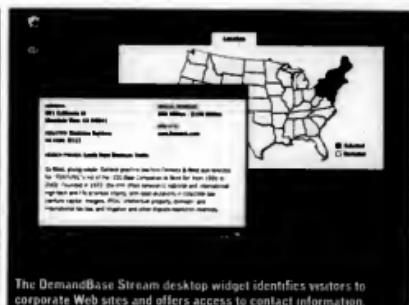
Lovett did say that although his research shows that 88% of companies with revenue greater than \$50 million use Web analytics tools, he believes that most are still simply collecting data and not making full use of the new tools.

NEW OPPORTUNITIES

Nonetheless, several vendors are moving quickly to meet what they expect will be growing corporate demand for Web 2.0 analytics tools.

For example, Omniture Inc. and Lithium Technologies Inc. joined forces in September to link their products to provide corporate customers with what the companies described as a holistic view of user behavior across multiple Web properties, including online communities.

Omniture, an Orem, Utah-based Web analytics vendor, and Lithium, a social media platform supplier in Emeryville, Calif., said that the integrated offering will help businesses capture social data from customer-facing blogs and forums and then integrate that information with other pertinent



The DemandBase Stream desktop widget identifies visitors to corporate Web sites and offers access to contact information.

company online data.

The vendors said that the joining of the Omniture and Lithium tools has already benefited Sprint Nextel Corp.'s use of data compiled from its BuzzAboutWireless.com online community for wireless device users.

BuzzAboutWireless, based on Lithium's platform, now uses Omniture analytics to better measure how social media can be used to acquire new customers and otherwise boost business, Omniture said.

And in August, DemandBase Inc. launched DemandBase Stream, a free desktop widget that can be used to identify visitors to a corporate Web site. When a company or organization visits a corporate site, the DemandBase tool streams the identity of the visitor across the bottom of desktops used by Web site operators, noted DemandBase CEO Chris Golec.

The operator can click on the name of the company or organization and get — for a fee — contact names and addresses via a link to the LinkedIn professional social network.

Responsys Inc. is using DemandBase Stream to gauge whether sales calls or e-mails to potential cus-

tomers have been successful, said Scott Orlach, chief marketing officer at the San Bruno, Calif.-based e-mail marketing company.

The sales team at Responsys, which has been using the tool for about six months, learns immediately when a recipient of a sales call visits its Web site. The company uses the LinkedIn process to contact the prospect, Orlach said.

Meanwhile, in October, start-up Nuconomy launched a free hosted Web service that can analyze user comments, ratings, video plays, shared links and the use of Flash, AJAX and Silverlight technologies on company-run Web sites.

The hosted tool includes a data mining engine that monitors all aspects of Web site traffic and user behavior. It also automatically highlights key findings that can help companies improve business operations, noted Shahar Nechman, CEO of San Francisco-based Nuconomy.

He said the data mining engine alerts users to the key data on a site. It also identifies unimportant data that can be ignored.

Nuconomy's Studio Web offering includes a two-way API that lets operators

change the look of sites based on current metrics and insights. For example, Web site operators can change advertising on a page or push specific content to a user based on his interests.

Some analytics companies have also started following the lead of Web 2.0 companies such as Facebook Inc. and Yahoo Inc. by opening APIs in order to help third-party developers build applications using data compiled by the analytics tools.

For example, Google Inc. unveiled a beta version of the Google Analytics API in October. Brett Crosby, group manager for Google Analytics, said the new API was created after some "renegade developers" wrote scripts or created other ways to build new applications based on Google Analytics data — without the company's help.

"We have a very large customer base, and a lot of these people are developers who want to do things with the data," Crosby said.

For example, some developers have built applications that display Google Analytics data on Apple's iPhone, while others have developed Flash-based versions of the service.

Google last month also unveiled an "enterprise-class" update to its free service that includes a slew of new features, including custom report generation, advanced segmentation and integration with AdSense.

In addition, in October Omniture Inc. released several different APIs to help developers more easily build applications on top of its hosted analytics tool, noted Chris Parkin, a senior director at the company. ■



E-voting Backers, Watchdogs Hope To Smooth Out Bumps Next Time

No big e-voting problems were reported last week. But the systems can still be improved.

By Grant Gross and Todd R. Weiss

LAST TUESDAY'S presidential election wasn't marred by widespread problems with electronic voting systems. Even e-voting watchdog groups said the election went relatively smoothly, without any reports of major technology failures.

But there were scattered problems with touch-screen and optical-scan machines. And some critics said there's

still work that can be done to improve the systems.

"This is an area that really cries out for some investment in terms of technology," said Jon Greenbaum, lead lawyer at Election Protection, a nonpartisan voter-advocacy group.

Rosemary Rodriguez, who chairs the U.S. Election Assistance Commission, said the EAC hopes to start certifying e-voting systems against a set of functional-

ity, accessibility and security requirements next year.

The EAC launched its certification program in early 2007, and six e-voting vendors have applied for certification thus far. But the EAC has yet to act on any of the applications, prompting some vendors to complain that it is moving too slowly.

Rodriguez defended the process, saying that the EAC is taking its time to make sure the right parameters are being evaluated. "We're not going to apologize for being thorough," she said.

Voting machine breakdowns were reported on Tuesday in some states, including Michigan, Ohio, Pennsylvania and New Jersey. But e-voting vendors and election officials downplayed the reports, saying the technology snafus were minor.

The problems "are not systemic," said Doug Lewis, executive director of the National Association of State Election Directors. "It's pretty much a normal Election Day."

Jeff Ortega, a spokesman for Ohio Secretary of State Jennifer Brunner, said the problems in that state included "minor hiccups" with the voter-verifiable paper printouts generated by touch-screen systems.

Some critics want an unattainable level of perfection, said David Beirne, executive director of the Election Technology Council, an e-voting vendor trade group.

"Every election is going to have its own individual challenges," Beirne said. But in this one, he claimed, e-voting systems performed "very well, regardless of the doomsday expectations."

Nonetheless, Brian Chess, chief scientist at security tools vendor Fortify Software Inc., called on Congress to pass "strict national

standards" for e-voting systems. "We need to test ways the machines could fail and the reliability of the machines in a true election environment," he said.

Earlier tests weren't entirely reassuring. For example, Ohio residents who distrust touch-screen systems were allowed to use paper ballots last week, an option that was added after tests commissioned last year by Brunner's office found security problems in every evaluated machine. And in March, Ohio officials found that some systems were dropping votes as data was uploaded to a server.

Meanwhile, some early voters in several states claimed that e-voting systems had "flipped" their choices from the intended candidates to rival ones.

Three more states — Maryland, Tennessee and Colorado — plan to adopt paper backups in coming elections. But that still leaves 15 states where touch-screen machines are being used without paper verifications. Replacing or reconfiguring those systems could cost each state millions of dollars.

But it's unclear whether fixing voting systems will be a top priority for government officials in light of the current economic problems, said e-voting critic Eugene Spafford, chairman of the Association for Computing Machinery's U.S. Public Policy Committee.

"We have so many other pressing national concerns that are going to require attention first," said Spafford, a computer science professor at Purdue University. "I wonder whether this will bubble up high enough to get addressed soon." ■

Gross writes for the IDG News Service.

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PHOTO BY ROBERT L. MITCHELL

■ THE GRILL

Gina Bianchini

The Ning CEO talks about **social networking, privacy** and the **rise of women** in hot new companies.

Dossier

Name: Gina Bianchini

Title: Co-founder and CEO

Organization: Ning Inc.

Location: Palo Alto, Calif.

Favorite technology: "I think blogging in all of its current and future iterations is a true breakthrough. Any opportunity for so many new voices to express themselves and to be heard is truly profound."

Favorite nonwork pastime: "Reading. There is a lifetime to learn in books."

Role model: "My mother, who was widowed at 36 with three teenagers and has never done what other people thought she should, only what she thought was right. She taught me to trust my instincts, reach for the stars, embrace everything with a sense of humor and never give up."

Philosophy in a nutshell: "Do for it, and especially keep doing what scares you the most."

Favorite vice: "Us magazine, which I reserve for the treadmill. They somehow cancel each other out."

Ask her to do anything but: "Lie."

Ning offers a Web-based service that lets users create their own social networks. Founded in 2004, Ning claims that its service now hosts more than 500,000 social networks, 65% of which are described as "active" — meaning they've been used in the past 30 days. The list of Ning-run networks includes *ImSaturn* (<http://imsaturn.com/>), which was set up by General Motors Corp. for Saturn car enthusiasts.

What effect is social networking having on business? It's going to have a tremendous impact. I think it takes a decade or more for a new medium to really find itself in its true behavior. You saw it with radio [and] television.

In terms of its effect on business, people are going to have a ton of experience

Continued on page 20

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I think the wrong answer and the wrong take-away is 'Oh, social networks are social, therefore women must be really good at it.' That's not what's happening.

Continued from page 18

ments going on, and they should. Not every company is going to have their own social network. A lot of them will, though, and they can be used in all sorts of interesting ways, whether it's a large computer company we know of that is using [Ning] for an internal social network, or what ImSaturn is doing in having a direct two-way conversation with customers.

Why should companies use services like Ning for social networking? Wouldn't it be better to pull that in-house? The challenge in doing that is, by the time you get your social network set up and organized, what people want to do [will be] fundamentally different. So the question is, do you want to staff a team that is doing rapid releases every two weeks on your internal social network?

There is a lot of risk that people will not end up using the social networks that are created internally at great cost and certainly at great development effort.

But the flip side of that is you've lost some control when a social network is run by a public service like Ning. I think that's happened anyway. Employees are going out on their own and creating private social networks on Ning or, in some cases, using public forums on MySpace or Facebook.

If you implement a full-blown social networking presence like OM did for its Saturn brand, what are the risks to that? I don't think there are risks. It requires a different way of interacting with your customers and the people who buy your products and services. You need to be fully able and excited to engage in that conversation. But at the same time, every business social network should have guidelines that are very clear to people that you don't just get to come and rant.

How do you balance user privacy concerns against Ning's business requirements to make money through targeted advertising? Certainly, Facebook had its problems with its Beacon advertising system last year. We don't need to do Beacon to make money. Our model fundamentally is different from a general, one-size-fits-all social network. The networks [that Ning users create] are topics, and we can take advantage of the ways in which advertisers are buying advertising today.

Specifically, it's [Google] AdSense that we're using, and we're seeing much higher effective CPMs than the general social networks. We're not looking to reinvent the advertising wheel. We're looking to expand the places and ways in which advertisers can get at people in the context of what they care about.

For example, on Ning, there is a social network for skiing. The fact that you're on that social network for skiing increases the probability tenfold that you're a skier. Because of that model, there is not necessarily a need for us to dig much deeper into areas that people feel are more private.

As portal vendors such as Yahoo and the rest of the Web add social networking elements to their own sites, will dedicated social networking sites such as Ning go away? I don't see it happening. Because social

two-way behavior is the fundamental, native behavior of the Web, the more the merrier. I don't think there will ever be a time when there is an oversaturation of ways in which people can communicate.

Compared with the Fortune 500, female C-level executives have a relatively strong presence in high-tech firms in general and in social networking ones in particular. Why do you think that is? I think it's so many women relative to not very many women, so let's remember degrees here. It's a little bit like being the world's tallest midget.

I think it has more to do with the fact that in social networking and Internet firms, you have a younger generation of men. You don't have middle-aged men running the shows in most cases. You have young, entrepreneurial men that, it seems, are willing to take a bet on young, entrepreneurial women. So it's not a coincidence in a case, for example, that my co-founder, Marc [Andreessen], is a year older than me. We're peers. And it's not a coincidence that [Facebook CEO] Mark Zuckerberg is taking a bet on Sheryl Sandberg [as Facebook's chief operating officer].

I think the wrong answer and the wrong take-away is, "Oh, social networks are social, therefore women must be really good at it." That's not what's happening.

Advertisers are image-conscious and wary of being placed next to questionable content, and on social networking sites like Ning, ad placement is out of your control. Is that an intractable problem? That's an issue across the Web. I don't think social networks are necessarily more of an issue in that respect. Certainly, you give people the ability to create perhaps a little bit more. But here's [how] I would encourage advertisers to look at it: It's like sponsoring an event, it's just online. When Budweiser or Nokia or the other big brands are sponsoring an outdoor concert series, for example, there is stuff happening at that concert that they may or may not want associated with their brand. But they still do it.

When you look at the overall trends and dynamics of advertising, you've got to go where the people are, and the people today love their social networks.

— Interview by Robert L. Mitchell



“ I RECENTLY EARNED PDUs
AND LANDED A NEW JOB
WHILE NETWORKING AT A
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AMAZING HOW EASILY MY
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The Next Windows: 7Up or New Vista?

RUNNING AWAY as fast as it can from Vista, Microsoft rolled out an alpha version of Windows 7 at its recent Professional Developers Conference. But is Windows 7 going to be 7Up, the Un-Vista, or is it going to be (gag) New Vista?

Microsoft would like you to believe that Windows 7 is going to be the next great desktop operating system. It's not. The company would also like you to please forget that it said the same things about Vista. Remember how Windows 98 was followed by Windows 98 Second Edition? That's what we have here: Windows 7 is Vista SE.

That's not an altogether bad thing. Windows 98 SE was a big improvement on Windows 98, and at this very early stage, it looks like Windows 7 will also be a major step up from Vista Service Pack 1. Of course, that's not saying much. Frankly, I think Windows XP Pro SP3 is a step up for Vista users.

Under the hood, Windows 7 uses the Vista engine. However, at the PDC, Steven Sinofsky, Microsoft's senior vice president of Windows and Windows Live, promised that Microsoft would be

tuning up this notoriously slow and cranky motor. It's too early to tell how successful that effort will be, but at least Sinofsky's team is tossing out Windows Mail and Windows Photo Gallery, which have no business being in an operating system.

In another change that any Vista user will welcome, Microsoft is finally reforming its annoying UAC (User Access Control). With Windows 7, you'll no longer be stuck endlessly saying "yes" every time a program tries to do anything with the operating system. UAC in Vista is a classic example of a good idea horribly executed. By forcing users to approve every step taken by a program instead

of improving security, UAC only made sure that people would hammer their approval as fast as possible without paying any attention to what was actually going on.

You'll be able to set the new UAC to notify you when a program attempts to install software or change settings, without its insisting that you click to continue. You'll also be able to set UAC so that it notifies you only when a program tries to change a setting. And, in what I suspect will be the most popular option, you'll be able to turn UAC off.

Windows 7 does add some features. Unfortunately, the ones I think are the most interesting — like DirectAccess, which automatically and securely hooks you up to your office's network resources, and BranchCache, which caches an office's frequently accessed Web sites — are tied closely to the forthcoming Windows

■ Right now, Windows 7 looks to be better than Vista, but no one knows when it will actually arrive.

Server 2008 R2, which is already becoming known as Windows 7 Server. I am so not crazy about the idea of having to buy another Windows server just to make the most of a new desktop.

In the past few years, starting with SharePoint Server 2003, Microsoft has made it almost impossible to use any of its network services without buying not just the basic server and the service's server, but a host of other servers as well. For SharePoint, for example, you also need SQL Server. I hate vendor lock-in, and now, not only is Microsoft turning its back-office servers into a prison block, but it's locking your desktop into the same jail. Thanks, but no thanks.

All things considered, I'd rather stick with my Linux desktops and Mac OS X. Windows 7 looks to be better than Vista right now, but no one knows when it will actually arrive, and in the meantime, I have work to do. But the fact is, like New Coke back in its day, my first taste of Vista SE is leaving a bad taste in my mouth. ■

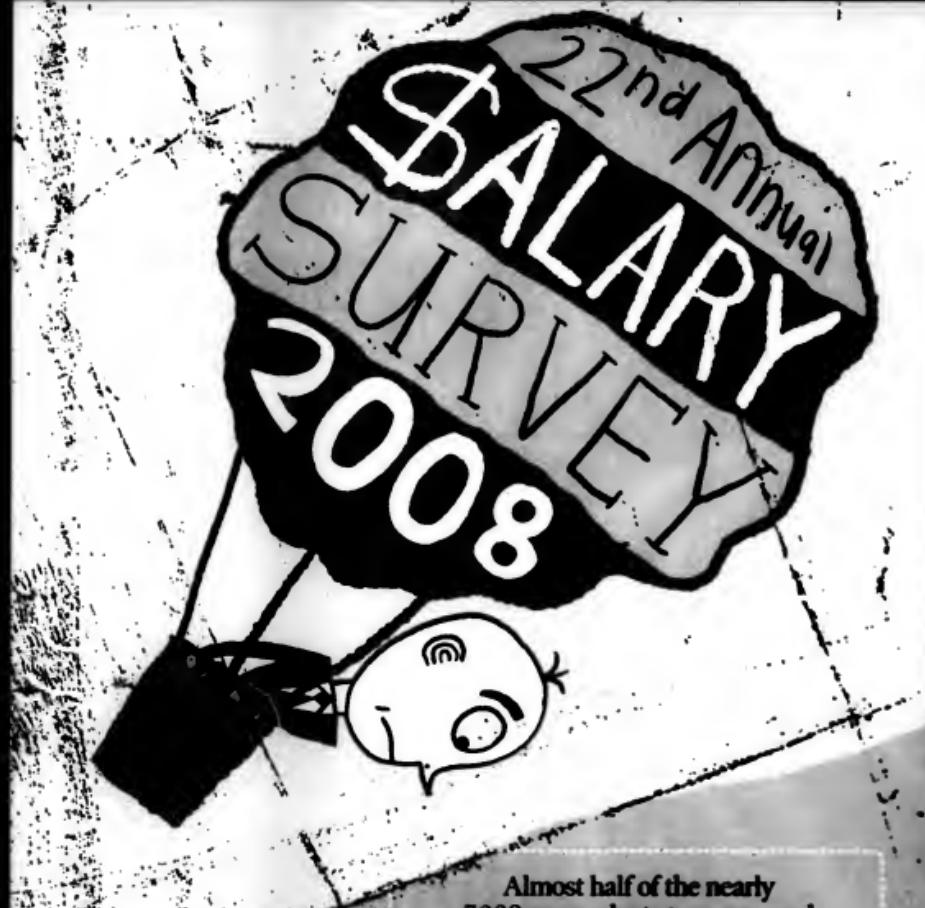
Steven J. Vaughan-Nichols has been writing about technology and the business of technology since CP/M-80 was cutting-edge and 300bit/sec. was a fast Internet connection — and we liked it! He can be reached at sjvn@vna1.com.

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26 Survey results show IT compensation stalled out this year, rising on average of just 2.3%. Read how IT staffers are juggling the tight times.

30 Find salary information for 20 IT positions, plus data by region and industry. Also, see key figures on vendor compensation, research pay and more.

34 From open source to green technology, the technology industry is facing challenges, but also opportunities, as IT professionals continue to find ways to help their companies succeed.



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FIXED income

THERE'S MORE WORK AND LESS BONUS MONEY, AND SALARIES AREN'T KEEPING PACE WITH INFLATION. HERE'S HOW SOME IT PROFESSIONALS ARE COPING WITH TOUGH TIMES.

BY THOMAS HOFFMAN

ALTER SCOTT may not be your typical IT professional. But the circumstances around his current compensation have become all too familiar.

Scott, a 20-year veteran, is a solutions architect at Verizon Business in East Meadow, N.Y., where he helps devise IP telephony systems for the company's commercial customers. Scott says he has helped land a few prominent deals since joining Verizon two years ago, including a \$30 million contract with a health care customer in 2007.

But despite his contributions, Scott received a paltry 1.78% salary increase in February, and his bosses had to fight for that amount. Verizon's human resources department felt Scott was still learning his position and deserved a smaller raise, he says. Eventually, the HR managers caved in to the pleas of his supervisors, who argued for a bigger, though still minuscule, salary bump.

Like just about everyone else these days, Scott has had to adjust his personal spending in the face of surging cost-of-living increases, including escalating energy costs. After recently paying off their credit card balances, Scott and his wife scaled back their cable TV service and trimmed other extras.

"I've had to do a real drill-down on my budget and make adjustments and still save for retirement," says Scott.

Yet despite his need for financial conservatism, Scott says he's otherwise satisfied in his job. "It's a pretty good gig," he says. "There's no micromanaging. You manage your own schedule, and I get the opportunity to

NATE WILLIAMS

Senior management
Middle management
Staff and entry level workers

work remotely when I'm not out in the field."

Scott's situation is a snapshot of what's happening to many other IT professionals around the U.S. as employers are pulling in the reins on salaries. According to *Computerworld*'s 22nd annual Salary Survey, based on responses from 6,801 U.S. IT workers, total compensation (salary plus bonus) rose an average of just 3.5% this past year, reflecting little change over the 3.7% average increase reported in 2007. Meanwhile, bonuses for IT professionals rose by an average of only 0.2% in 2008, compared with 3.4% in 2007.

"I think IT professionals have reluctantly accepted that the days of special treatment for IT — which did endure for nearly a decade — are gone," says David Van De Voort, an IT workforce specialist at Mercer in Chicago.

Certainly, the go-go days of the late 1990s — when Web developers and other IT professionals with hot skills were lavished with signing bonuses and other goodies — are a distant memory, says David Weldon, a former workforce analyst at Aberdeen Group Inc. who is currently with Wellesley Information Services. The best advice for IT workers who have been stuck at a certain pay level is to try to tie their

own performance to the company's bottom line or draw a connection between how their work has helped the company to improve its productivity or operational efficiency, says Weldon.

And while IT salaries should see a lift once the economy improves, individual increases will largely hinge on the types of process and technical skills that businesses require, says Katherine Spencer Lee, executive director of IT staffing firm Robert Half Technology and a *Computerworld* columnist. "Technology is all about need vs. want and ROI," she says.

For instance, Lee expects to see continued demand for IT professionals with business intelligence skills who can help design and develop dashboards that senior managers use to track sales and expenses more closely. (Read more about hot skills on page 41.)

ROCKY ROAD AHEAD

Despite the muddled outlook for IT wages, 60% of survey respondents said they're either satisfied (43%) or very satisfied (17%) with their total compensation packages.

"I feel good about my compensation," says Chris Ritchie, a technical analyst at Catholic Health Initiatives in Exton, Pa., who received a 2.5% salary increase after his first seven months of full-time employment with the nonprofit health organization. "I feel that my original salary for this role in this [industry] was competitive."

Still, more than half the respondents (52%) said they're looking for new jobs, with higher pay the prime motivator for 63% of them.

One — Mark Rathwell, a programmer at Michigan

own performance to the company's bottom line or draw a connection between how their work has helped the company to improve its productivity or operational efficiency, says Weldon.

SALARY ON A SLOW RISE

Salaries increased just 3.8% across the board in 2008.



How has your base salary changed in the past year?



BONUSES EVAPORATE

Bonuses flat-lined, rising just 0.2% across the board in 2008.



How has your bonus changed, compared with one year ago?



PERK CITY

The top perks and compensation offered other than cash bonuses:

Health benefits/insurance	99%
Life insurance	78%
Matching 401(k) contributions	72%
Tuition reimbursement	64%
Flexible scheduling	52%
Mobile phone	42%
Comp time	31%
Telecommuting option	30%
Fringe/benefits/ gift certificates	28%
Stock purchase plan	22%
Employee stock ownership program	22%
Profit sharing	17%
Additional time off/ vacation	15%
Dependent care support	8%
Company car	4%

BASE: 6,860 RESPONDENTS.
MULTIPLE RESPONSES ALLOWED.

DOLLARS MAKE SENSE

What matters most to you about your job?

Base pay	72%
Benefits	58%
Vacation time/ paid time off	43%
Flexible work schedule/ telecommuting/ work at home	39%
Challenge of job/ responsibility	32%
Job stability	30%
Potential for career advancement and development	28%
Skill development/ educational and training opportunities	24%
Job atmosphere/ community	22%
My opinion and knowledge are valued	18%
Bonus opportunities	17%
Financial stability of company	15%

BEST JOBS

Titles that saw higher-than-average gains in total compensation:

Web developer	5.6%
Network administrator	4.8%
Information security manager	4.5%
Storage administrator/architect	4.5%
E-commerce/Internet manager	4.3%
Quality assurance specialist	4.2%
Help desk manager	4.2%

BUST JOBS

Titles that saw losses or lower-than-average gains in total compensation:

Director of systems development	-1.7%
Communications specialist	-0.9%
Technical trainer	-0.6%
Database architect/developer/modeler	0.3%
Technology/business systems analyst	1.3%
Chief technology officer	1.5%

BEST INDUSTRIES

Largest average increases in total compensation, by industry:

Construction/engineering	4.9%
Business services/consulting (non-computer-related)	4.4%
Defense/aerospace	4.4%
Entertainment/marketing/advertising	4.3%
Manufacturing (computer-related)	4.3%
Health/medical services	4.0%

BUST INDUSTRIES

Smallest average increases in total compensation, by industry:

Transportation/logistics	1.3%
Banking	2.0%
Legal/insurance/real estate	2.3%
Computer dealer/reseller	2.9%
Manufacturing (non-computer-related)	3.1%
Nonprofit	3.2%
Telecommunications	3.3%

State University Federal Credit Union in East Lansing — is taking steps to blaze his own trail as an independent IT consultant. Rathwell has worked in IT at the credit union for four years, but he says opportunities to tackle new challenges there just haven't materialized. Plus, he says, "the pay is just awful."

Rathwell says he received a 3% salary increase earlier this year, which maps with his previous raises. But with gas prices surging and monthly student loan payments of \$350 having recently kicked in, Rathwell has had to take on a second job as a part-time webmaster. "I've cut [my expenses] as far as I can," he says. "There's nothing else left to cut."

At a median annual base salary of \$72,450, IT staffers are still earning well above the median household income of \$50,233, according to figures from the U.S. Census Bureau. Still, the weak economy and an inflation rate of around 3% are taking a toll on all types of workers, including those in IT. Plus, their problems are being further compounded by shrinking corporate revenues and profits. As IT departments are being forced to cut costs, many CIOs are giving more work to their

EXPERIENCE COUNTS
Survey respondents who have built their careers in IT, reap the benefits of higher pay and bonuses, albeit smaller overall increases year to year.

YEARS IN IT	AVERAGE SALARY	AVERAGE BONUS	2008 TOTAL	2007 TOTAL	PERCENTAGE CHANGE
Less than 5 years	\$54,443	\$2,827	\$57,270	\$53,380	7.3%
5 to less than 10 years	\$66,533	\$4,952	\$73,485	\$69,861	5.2%
10 to less than 15 years	\$82,621	\$5,644	\$88,265	\$85,312	3.5%
15 to less than 25 years	\$96,135	\$8,218	\$104,353	\$101,270	3.0%
25 years or more	\$103,336	\$8,896	\$112,232	\$109,802	2.2%

GENDER GAP
Three common titles and the earning power of men vs. women:

DIRECTOR OF IT	
Men (base: 447)	Women (base: 54)
\$522,147	\$106,797
HELP DESK/TECHNICAL SUPPORT MANAGER	
Men (base: 60)	Women (base: 25)
\$73,300	\$64,100
IT MANAGER	
Men (base: 560)	Women (base: 105)
\$91,737	\$84,968

existing IT staffers rather than hiring for open positions or replacing departing IT workers. Forty-six percent of IT workers surveyed reported taking on extra work because of budget cuts and layoffs.

"CIOs are dealing with employees who feel they

TIPPED SCALE

AVERAGE 2008 SALARY	
MALE IT WORKERS	FEMALE IT WORKERS
\$67,110	\$58,503
UP 2.9% FROM LAST YEAR	
AVERAGE 2008 BONUS	
MALE IT WORKERS	FEMALE IT WORKERS
\$6,982	\$5,243
UP 0.4% FROM LAST YEAR	
BASE: 5,650 MEN, 1,108 WOMEN	

have too much on their plates," says Umesh Ramakrishnan, vice chairman at CTPPartners, an executive search firm in Cleveland. Consequently, IT leaders need to keep a close eye on their troops "to make sure no one is beyond their breaking point," he adds.

Although more than half of this year's Salary Survey respondents (56%) said their stress levels at work are about the same as they were a year ago, Greg Felt is among those who report that the pressure is mounting.

Felt has been a database analyst at Arrow Electronics Inc. in Phoenix for 12 years. But the company has closed several facilities over the past few years, and Felt says that as IT head count has dwindled, he and other remaining IT workers have absorbed the workload.

Felt estimates that his own stress level is about 30% higher than it was three years ago. "I try not to let it get to me," he says. "I just try to let it go before I go home in the evening."

Scott, a former layoff victim, has come to learn that job security is a tenuous thing, even when business conditions seem relatively strong. Although there are staff openings at his company, "you never know what upper management is thinking," he says.

"At the end of the day, the guy at the top is looking at the numbers and what the stock is doing," says Scott. "I've seen it where the business can change direction and people are here today and gone tomorrow." ■

BEST JOBS

Titles that saw higher-than-average gains in total compensation:

Web developer	8.8%
Network administrator	4.8%
Information security manager	4.8%
Storage administrator/analyst	4.8%
E-commerce/biased manager	4.8%
Quality assurance specialist	4.8%
Help desk manager	4.8%

BUST JOBS

Titles that saw losses or lower-than-average gains in total compensation:

Director of systems development	-1.7%
Communications specialist	-0.8%
Technical writer	-0.8%
Database architect/developer/analyst	-0.8%
Technology/business systems analyst	1.3%
Chief technology officer	1.8%

BEST INDUSTRIES

Largest average increases in total compensation, by industry:

Computer and electronic products
Computer systems design, software publishing
Computer and electronic equipment, parts and accessories
Computer and electronic product manufacturing
Computer and electronic product manufacturing

BUST INDUSTRIES

Smallest average increases in total compensation, by industry:

Automobiles and parts

State University Federal Credit Union in East Lansing — is taking steps to blaze his own trail as an independent IT consultant. Rathwell has worked in IT at the credit union for four years, but he says opportunities to tackle new challenges there just haven't materialized. Plus, he says, "the pay is just awful."

Rathwell says he received a 3% salary increase earlier this year, which maps with his previous raises. But with gas prices surging and monthly student loan payments of \$350 having recently kicked in, Rathwell has had to take on a second job as a part-time webmaster. "I've cut [my expenses] as far as I can," he says. "There's nothing else left to cut."

At a median annual base salary of \$72,450, IT staffers are still earning well above the median household income of \$50,233, according to figures from the U.S. Census Bureau. Still, the weak economy and an inflation rate of around 5% are taking a toll on all types of workers, including those in IT. Plus, their problems are being further compounded by shrinking corporate revenues and profits. As IT departments are being forced to cut costs, many CIOs are giving more work to their

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10 to less than 15 years	\$82,621	\$5,644	\$88,265	\$85,312	3.5%
15 to less than 25 years	\$90,135	\$6,216	\$104,353	\$101,270	3.0%
25 years or more	\$103,330	\$8,086	\$122,232	\$108,802	2.2%

GENDER GAP

Three common titles and the earning power of men vs. women:

DIRECTOR OF IT	BASE: \$144,500
HELP DESK/TECHNICAL SUPPORT MANAGER	BASE: \$20,000
IT MANAGER	BASE: \$120,000
IT SPECIALIST	BASE: \$100,000

existing IT staffers rather than hiring for open positions or replacing departing IT workers. Forty-six percent of IT workers surveyed reported taking on extra work because of budget cuts and layoffs.

"CIOs are dealing with employees who feel they

TIPPED SCALE

AVERAGE 2008 SALARY

BASE: \$5,650 MEN, \$4,950 WOMEN
IT SPECIALIST
IT MANAGER
HELP DESK/TECHNICAL SUPPORT MANAGER

AVERAGE 2008 BONUS

BASE: \$5,650 MEN, \$4,950 WOMEN
IT SPECIALIST
IT MANAGER
HELP DESK/TECHNICAL SUPPORT MANAGER

have too much on their plates," says Umesh Ramakrishnan, vice chairman at CTPartners, an executive search firm in Cleveland. Consequently, IT leaders need to keep a close eye on their troops "to make sure no one is beyond their breaking point," he adds.

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ONE DIRECTORY THAT KNOWS WHO CAN HAVE WHAT WHEN.



INTEROP X ABILITY RUN WITH IT.

Unify identity management across Windows Server® 2008 and SUSE® Linux Enterprise Server. Microsoft® and Novell® have delivered a new secure and reliable framework that lets you manage all your identities across Windows and Linux on the directory of your choice. Run with it today, eliminate the headaches of keeping two directories in sync and spend your time focusing on business instead of passwords.

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Senior Management Positions

JOB TITLE	AVERAGE SALARY	AVERAGE BONUS		PERCENT CHANGE
CIO/vice president of IT	\$144,248	\$26,861	\$173,109	+3.5%
Chief security officer	\$107,919	\$8,116	\$116,037	+3.7%
Chief technology officer	\$138,463	\$26,841	\$165,304	+1.5%
Director of IT operations	\$109,285	\$11,363	\$120,649	+4.1%
Director of systems development	\$137,441	\$25,842	\$163,383	-1.7%
Internet technology strategist	\$121,044	\$11,325	\$132,369	+3.5%

Middle Management Positions

Application development manager	\$102,442	\$8,364	\$110,806	\$106,419	+4.1%
Communications manager	\$78,454	\$5,186	\$83,640	\$80,786	+3.5%
Computer operations manager	\$75,794	\$4,278	\$80,073	\$77,453	+3.4%
Database manager/data warehousing manager	\$87,106	\$6,020	\$103,126	\$99,644	+3.5%
E-commerce/Internet manager	\$82,254	\$6,963	\$89,217	\$85,557	+4.3%
Help desk/tech support manager	\$68,389	\$2,426	\$70,815	\$67,947	+4.2%
Information security manager	\$95,807	\$6,169	\$101,996	\$97,585	+4.5%
IT manager	\$85,056	\$5,605	\$90,861	\$87,253	+3.9%
Network manager	\$78,482	\$3,817	\$80,299	\$77,609	+3.5%
Product manager	\$102,513	\$13,963	\$116,496	\$112,160	+3.8%
Project manager	\$95,259	\$6,026	\$101,266	\$96,409	+2.9%

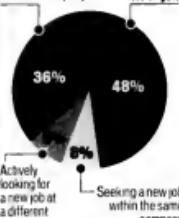
Staff and Entry-Level Positions

Business intelligence analyst	\$74,221	\$2,896	\$77,116	\$74,860	+3.0%
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STAYING PUT

Which one of the following best describes your job search status?

Passively looking for a new job at a different company
Not looking for a new job



BASE: 6,801 RESPONDENTS

WHAT SEEKERS WANT

The top reasons they're looking for a new job:

Looking for higher compensation	63%
Career opportunities	47%
More interesting/challenging work	47%
Looking for more personal fulfillment	44%
Seeking more responsibility	29%
Want less stress	23%
Looking for more job stability	22%
Better personal/family situation	22%

BASE: 3,146 RESPONDENTS
MULTIPLE RESPONSES ALLOWED

WHY OTHERS STAY

The top reasons they aren't looking for a new job:

Satisfied with current job responsibilities	70%
Satisfied with current compensation	53%
Satisfied with company culture	51%
Job market is poor/few opportunities	20%
Other	10%

BASE: 3,231 RESPONDENTS
MULTIPLE RESPONSES ALLOWED

BETTER THAN MONEY

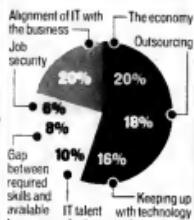
43% of respondents said they wouldn't consider switching to a job with lower compensation. Of those who would, these are the top five enticements:

1. Better work/life balance **34%**
2. More job satisfaction **29%**
3. Location **29%**
4. Schedule flexibility **22%**
5. Stock options **12%**

BASE: 675 RESPONDENTS
MULTIPLE RESPONSES ALLOWED

MORE LEAN TIMES AHEAD

The top challenges facing workers in the IT industry today:



BASE: 675 RESPONDENTS PERCENTAGES DON T ADD UP TO 100 BECAUSE OF ROUNDING

BUDGETS UNDER FIRE

The top factors affecting working conditions:

Factor	Percentage
Budget cuts	53%
Increased workload (due to staff cuts)	48%
Hiring freeze	33%
Permanent staff layoffs	28%
Cancelled project(s)	25%
Training cuts	25%
Salary freeze	22%
Increased outsourcing	22%
Merge/acquisition	20%
Contract staff layoffs	18%
Contract/consultant hires	12%
Increased hiring/staffing	9%
Decreased outsourcing	3%

BASE: 675 RESPONDENTS
MULTIPLE RESPONSES ALLOWED

Staff and Entry-Level Positions

JOB TITLE	AVERAGE SALARY	AVERAGE BONUS	PERCENT CHANGE		
Database administrator	\$85,558	\$3,878	\$80,436	\$85,888	+4.1%
Database analyst	\$74,163	\$1,944	\$76,107	\$73,148	+4.0%
Database architect	\$102,441	\$8,531	\$110,972	\$113,862	-2.5%
Database developer/modeler	\$83,405	\$4,084	\$87,488	\$84,672	+3.1%
Help desk/tech support specialist	\$48,439	\$1,180	\$49,619	\$47,873	+3.6%
Information security specialist	\$82,136	\$5,610	\$87,746	\$84,464	+3.9%
Network Administrator	\$58,365	\$1,155	\$59,520	\$56,782	+4.8%
Network engineer/wireless network engineer	\$76,804	\$2,648	\$79,450	\$78,153	+4.3%
Programmer/analyst	\$67,626	\$1,665	\$69,281	\$67,119	+3.2%
Project leader	\$85,284	\$4,514	\$89,798	\$87,199	+3.0%
Quality assurance specialist	\$68,511	\$2,968	\$71,379	\$68,487	+4.2%
Software developer	\$77,767	\$3,883	\$81,660	\$76,557	+3.9%
Software engineer	\$88,284	\$3,863	\$92,147	\$89,364	+3.1%
Storage administrator/architect	\$96,907	\$6,036	\$104,943	\$100,435	+4.5%
Systems administrator	\$67,293	\$1,912	\$69,205	\$68,954	+3.4%
Systems analyst	\$65,432	\$5,546	\$70,978	\$68,620	+3.4%
Senior systems analyst	\$84,862	\$4,133	\$89,015	\$86,958	+2.4%
Systems architect	\$99,078	\$9,920	\$106,998	\$105,158	+3.7%
Systems programmer	\$89,723	\$4,502	\$94,225	\$92,068	+2.3%
Technical trainer	\$65,452	\$3,163	\$68,615	\$69,037	-0.6%
Technician	\$44,155	\$825	\$44,900	\$43,656	+3.0%
Technology/business systems analyst	\$72,658	\$3,492	\$76,150	\$75,146	+1.3%
Web developer	\$85,070	\$1,307	\$88,377	\$82,633	+5.6%

Senior Management Positions

JOB TITLE	AVERAGE SALARY	AVERAGE BONUS	2008 TOTAL	2007 TOTAL	PERCENT CHANGE
CIO/vice president of IT	\$144,348	\$28,891	\$173,300	\$167,274	+3.5%
Chief security officer	\$107,918	\$8,118	\$116,037	\$111,937	+3.7%
Chief technology officer	\$136,463	\$28,841	\$165,304	\$162,801	+1.5%
Director of IT operations	\$106,285	\$11,963	\$120,648	\$115,878	+4.1%
Director of systems development	\$137,441	\$28,842	\$165,303	\$166,253	-1.7%
Internet technology strategist	\$121,844	\$11,825	\$132,300	\$127,848	+3.5%

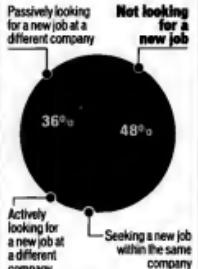
Middle Management Positions

Application development manager	\$102,442	\$8,364	\$110,806	\$106,610	+4.1%
Communications manager	\$78,484	\$5,196	\$83,640	\$80,798	+3.5%
Computer operations manager	\$78,794	\$4,278	\$86,573	\$77,453	+3.4%
Database manager/ data warehousing manager	\$67,500	\$5,000	\$72,500	\$69,844	+3.5%
E-commerce/ Internet manager	\$82,284	\$6,963	\$89,217	\$86,957	+4.3%
Help desk/ tech support manager	\$68,200	\$3,428	\$70,816	\$67,947	+4.2%
Information security manager	\$66,367	\$3,100	\$70,500	\$67,500	+4.5%
IT manager	\$66,000	\$3,000	\$69,000	\$67,200	+3.0%
Network manager	\$78,482	\$3,917	\$86,200	\$77,900	+3.5%
Product manager	\$106,978	\$11,963	\$118,000	\$112,100	+5.8%
Project manager	\$66,200	\$3,025	\$70,200	\$66,400	+2.9%

Staff and Entry-Level Positions

Business intelligence analyst	\$74,201	\$2,000	\$77,100	\$74,000	+3.0%
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STAYING PUT
Which one of the following best describes your job search status?



WHAT SEEKERS WANT

The top reasons they're looking for a new job:

Looking for higher compensation	63%
Career opportunities	47%
More interesting/challenging work	47%
Looking for more personal fulfillment	44%
Seeking more responsibility	39%
Want less stress	29%
Looking for more job stability	22%
Better personal/family situation	22%

BASE: 3,546 RESPONDENTS
MULTIPLE RESPONSES ALLOWED

WHY OTHERS STAY

The top reasons they aren't looking for a new job:

Job satisfaction	63%
Job security	47%
Good benefits	47%
Good working conditions	44%
Good pay	39%
Want less stress	29%
Job stability	22%
Better personal/family situation	22%

BASE: 3,231 RESPONDENTS
MULTIPLE RESPONSES ALLOWED

BETTER THAN MONEY

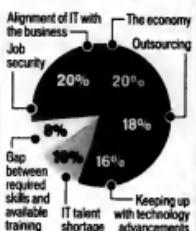
43% of respondents said they wouldn't consider switching to a job with lower compensation. Of those who would, these are the top five enticements:

1. Better work/life balance 34%
2. More job satisfaction 29%
3. Location 29%
4. Schedule flexibility 22%
5. Stock options 19%

BASE: 6,755 RESPONDENTS;
MULTIPLE RESPONSES ALLOWED

MORE LEAN TIMES AHEAD

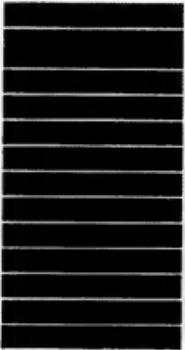
The top challenges facing workers in the IT industry today:



BASE: 6,901 RESPONDENTS PERCENTAGES DON'T ADD UP TO 100 BECAUSE OF ROUNDING

BUDGETS UNDER FIRE

The top factors affecting working conditions:



BASE: 4,960 RESPONDENTS;
MULTIPLE RESPONSES ALLOWED

Staff and Entry-Level Positions

JOB TITLE	AVERAGE SALARY	AVERAGE BONUS	2006 TOTAL	2007 TOTAL	PERCENT CHANGE
Database administrator	\$66,500	\$3,870	\$96,420	\$96,900	+1.0%
Database analyst	\$74,100	\$1,944	\$76,107	\$75,340	-1.0%
Database architect	\$102,441	\$6,531	\$118,572	\$115,562	-2.5%
Database developer/modeler	\$83,405	\$4,084	\$87,400	\$84,572	-3.1%
Help desk/tech support specialist	\$48,430	\$1,300	\$46,810	\$47,670	+3.6%
Information security specialist	\$82,100	\$5,810	\$87,740	\$84,464	-3.9%
Network Administrator	\$66,800	\$1,300	\$86,800	\$86,700	-1.8%
Network engineer/wireless network engineer	\$76,804	\$2,646	\$79,450	\$78,153	-4.3%
Programmer/analyst	\$67,620	\$1,000	\$90,201	\$87,110	-3.2%
Project leader	\$85,204	\$4,914	\$98,700	\$97,100	-3.0%
Quality assurance specialist	\$66,911	\$2,000	\$71,970	\$69,467	-4.2%
Software developer	\$77,767	\$3,983	\$81,000	\$78,557	-3.9%
Software engineer	\$68,254	\$3,000	\$82,147	\$80,364	-3.1%
Storage administrator/architect	\$66,907	\$3,030	\$104,943	\$106,435	+1.5%
Systems administrator	\$67,200	\$1,812	\$86,200	\$86,864	+3.4%
Systems analyst	\$86,432	\$5,546	\$70,570	\$68,620	-3.4%
Senior systems analyst	\$94,302	\$4,300	\$96,070	\$95,660	-2.4%
Systems architect	\$96,975	\$8,920	\$106,000	\$105,500	-3.7%
Systems programmer	\$66,720	\$4,000	\$86,200	\$86,000	-2.3%
Technical trainer	\$66,482	\$2,300	\$86,010	\$86,517	+0.6%
Technician	\$44,305	\$1,000	\$44,000	\$43,800	-3.0%
Technology/business systems analyst	\$72,000	\$3,400	\$76,300	\$75,340	-1.3%
Web developer	\$66,570	\$1,000	\$86,570	\$86,500	-5.6%

A Sampling of Average Total Compensation by Region

Job Title	New England	Middle Atlantic	South Atlantic	North Central	South Central	Mountain	Pacific
CIO/vice president of IT	\$191,563	\$195,429	\$165,443	\$176,906	\$140,780	\$145,807	\$160,508
Director of IT	\$127,912	\$131,699	\$122,962	\$106,826	\$102,844	\$124,427	\$135,496
IT manager	\$82,024	\$105,390	\$90,306	\$88,300	\$80,948	\$81,434	\$87,979
Database administrator	\$86,463*	\$87,100*	\$87,353	\$84,376	\$89,715	\$85,578*	\$110,431*
Help desk/tech support specialist	\$53,974	\$47,586	\$54,633	\$48,294	\$43,383	\$44,923*	\$56,068
Network administrator	\$60,043*	\$60,700	\$63,731	\$56,642	\$55,864	\$56,417	\$66,313
Programmer/analyst	\$80,295*	\$70,076	\$74,128	\$66,170	\$73,641	\$76,554	\$80,449
Project manager	\$101,966	\$115,775	\$106,338	\$83,148	\$86,515	\$102,882*	\$96,468
Software engineer	\$100,247	\$96,081	\$92,105	\$83,376	\$90,470	\$95,980	\$104,231
Systems administrator	\$88,450*	\$71,012	\$67,899	\$63,804	\$70,274	\$71,465	\$75,470
Senior systems analyst	\$103,420*	\$96,671	\$93,645	\$86,221	\$81,466	\$87,813*	\$87,887
Systems architect	\$128,870*	\$106,548*	\$112,223	\$102,560	\$108,859*	\$103,864*	\$120,972

REO TEXT: The total base for this job title in this particular region was fewer than 30 responses but more than 15. These figures should be used for comparison only, because they don't constitute a statistically significant sampling.

***STARRED TEXT:** The total base for this job title in this particular region was fewer than 16 responses but more than nine. These figures should be used for comparison only.

REGIONS

New England: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island

Middle Atlantic: New York, New Jersey, Pennsylvania

South Atlantic: Delaware, District of Columbia, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida

North Central: Wisconsin, Michigan, Illinois, Indiana, Ohio, North Dakota, South Dakota, Minnesota, Nebraska, Iowa, Kansas, Missouri

South Central: Kentucky, Tennessee, Mississippi, Alabama, Oklahoma, Arkansas, Louisiana, Texas

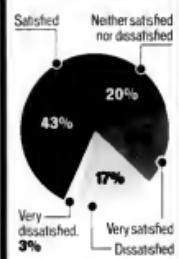
Mountain: Idaho, Montana, Wyoming, Nevada, Utah, Colorado, Arizona, New Mexico

Pacific: Alaska, Washington, Oregon, California, Hawaii

How Satisfied Are Employees?

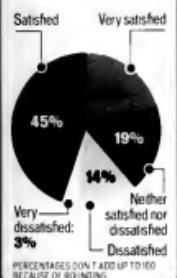
MONEY

How satisfied are you today with your total compensation package?



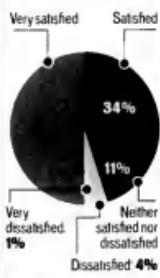
CURRENT JOB

How satisfied are you with your current job?



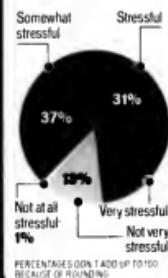
CAREER IN IT

How satisfied are you with your decision to pursue a career in IT?



STRESS

How stressful is your job?



BASE FOR ALL FOUR CHARTS: 6,801 RESPONDENTS

A Sampling of Average Total Compensation by Region

	New England	Middle Atlantic	South Atlantic	North Central	South Central	Mountain	Pacific
CIO/vice president of IT	\$104,000	\$105,442	\$106,700	\$106,700	\$106,000	\$106,000	\$106,000
Director of IT	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500	\$82,500
IT manager	\$68,000	\$68,000	\$68,000	\$68,000	\$68,000	\$67,500	\$67,500
Database administrator	\$65,000*	\$67,500	\$68,000	\$68,750	\$68,750	\$68,750*	\$68,750*
Help desk/tech support specialist	\$58,000	\$58,000	\$58,000	\$58,000	\$58,000	\$58,000	\$58,000
Network administrator	\$58,000*	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750
Programmer/analyst	\$58,750*	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750
Project manager	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750
Software engineer	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750
Systems administrator	\$58,750*	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750
Senior systems analyst	\$58,750*	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750
Systems architect	\$58,750*	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750	\$58,750

RED TEXT: The total base for this job title in the particular region was fewer than 30 responses but more than 15. These figures should be used for comparison only, because they don't constitute a statistically significant sampling.

***STARRED TEXT:** The total base for this job title in this particular region was fewer than 16 responses but more than nine. These figures should be used for comparison only.

REGIONS

New England: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island

Middle Atlantic: New York, New Jersey, Pennsylvania

South Atlantic: Delaware, District of Columbia, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida

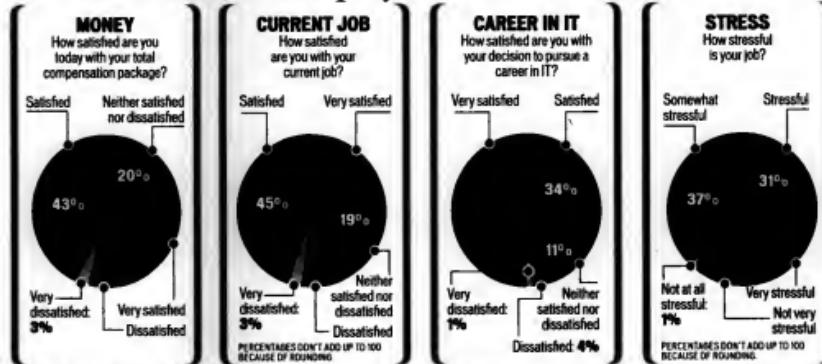
North Central: Wisconsin, Michigan, Illinois, Indiana, Ohio, North Dakota, South Dakota, Minnesota, Nebraska, Iowa, Kansas, Missouri

South Central: Kentucky, Tennessee, Mississippi, Alabama, Oklahoma, Arkansas, Louisiana, Texas

Mountain: Idaho, Montana, Wyoming, Nevada, Utah, Colorado, Arizona, New Mexico

Pacific: Alaska, Washington, Oregon, California, Hawaii

How Satisfied Are Employees?



BASE FOR ALL FOUR CHARTS: 1,891 RESPONDENTS

A Sampling of Average Total Compensation by Industry

Director of IT	Project manager	Help desk/tech support specialist
Banking \$137,041	Education \$86,799	Manufacturing (noncomputer) \$91,916
Finance/accounting \$210,591	Health care \$129,444	Services/consulting (computer) \$102,240
Services/consulting (computer) \$150,526	Services/consulting (computer) \$133,045	Services/consulting (computer) \$74,214
Health care \$147,835	Manufacturing (noncomputer) \$133,910	Health care \$70,238
Legal/insurance/real estate \$217,238	Government \$109,281	Education \$59,361
Manufacturing (noncomputer) \$190,915	Health care \$89,116	Manufacturing (noncomputer) \$68,773
Government \$122,512	Finance/accounting \$116,096	Government \$68,787
Education \$155,498	Legal/insurance/real estate \$126,632	Retail trade \$66,596
	Nonprofit organization \$91,285	Legal/insurance/real estate \$126,708
	Entertainment/marketing/advertising \$79,376	Manufacturing (noncomputer) \$70,682
	Finance/accounting \$172,520	Entertainment/marketing/advertising \$100,071
	Software engineer	Technology/business systems analyst
Services/consulting (computer) \$80,529	Services/consulting (computer) \$87,726	Services/consulting (computer) \$83,493
Government \$67,055	Manufacturing (noncomputer) \$83,222	Manufacturing (noncomputer) \$74,822
Manufacturing (noncomputer) \$86,471	Health care \$84,143	Health care \$75,588
Health care \$76,673	Government \$86,088	Government \$63,840*
Finance/accounting \$73,312	Telecommunications \$82,891	Banking \$86,268*
Education \$59,057	Finance/accounting \$106,893*	Transportation/logistics \$81,940*
Legal/insurance/real estate \$75,550	Legal/insurance/real estate \$86,116*	Retail trade \$53,391
Retail trade \$77,172	Banking \$82,720*	Legal/insurance/real estate \$90,510*
	Entertainment/marketing/advertising \$83,420*	Banking \$84,491*
		Energy/utilities \$84,491*

RED TEXT: The total base for this job title in this particular industry was fewer than 30 responses but more than 15. These figures should be used for comparison only, because they don't constitute a statistically significant sampling.

***STARRED TEXT:** The total base for this job title in this particular industry was fewer than 15 responses but more than nine. These figures should be used for comparison only.

12 WAYS to Plump Up YOUR Paycheck

MINIMIZE YOUR EXPENSES AND MAXIMIZE YOUR PAY WITH THESE SALARY-STRETCHING STRATEGIES.



1. Dig Into Your Benefits

BY MARY BRANDEL

MAKING the most of the benefits your company offers is a great way to earn what some human resources professionals call a "hidden paycheck." By taking advantage of benefits such as tuition reimbursement, employer discount programs and flexible spending accounts, you can boost your total compensation package.

In fact, with bonuses and pay raises diminishing, some people are putting more stock in benefits. In a recent survey by Capital One Financial Corp., recent college graduates ranked benefits slightly ahead of pay when it comes to job-hunting priorities. Sixty-six percent said that comprehensive benefits packages are the most important factor in their search for employment, while 60% named salary as the top priority. According to the survey, valued benefits include health care, 401(k) plans, child care and domestic partnership benefits.

Some benefits are more valuable than others, says Michael Marcus, an

advanced capacity/performance analyst at Atos Origin Inc., an IT consultancy in Arlington, Texas. He recently cashed in on a benefit that enables Atos employees to buy computers and software at a discount, which amounted to about \$200 in savings.

There's real gold in tuition reimbursement benefits, according to Michael

Godin, a professional services consultant at Ecora Software Corp. in Portsmouth, N.H. Godin took advantage of a former employer's tuition reimbursement benefit to get a master's in computer science. The employer paid for half the cost of the degree, and with his resulting salary increase, Godin was able to earn back his investment in his education in just one year. "If you can get the employer to pay for your education, that's a real cost-benefit win," he says.

In Computerworld's 2008 Salary Survey, 18% of respondents said they wish their employers offered tuition reimbursement. ■

Brandel is a Computerworld contributing writer. Contact her at marybrandel@verizon.net.

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RAVE MELLOWS

2. Bump Up Your Bonus

BY THOMAS HOFFMAN

AS COMPANIES continue to slash costs, bonuses are also getting whacked — and not just on Wall Street. According to Computerworld's 2008 Salary Survey, bonuses for IT workers rose only 0.2% from 2007 levels. At a time when 3% to 4% salary raises are failing to keep up with inflation rates that are rising above 5%, dwindling bonuses are making tough times even more challenging for IT professionals.

"There's just not a whole lot of bonus money around, so we're spreading that peanut butter more and more thinly," says David Van De Voort, an IT workforce specialist at Mercer, an HR consultancy in Chicago.

One way for IT workers to tap into existing bonus pools — or persuade management to grant a performance bonus — is by delivering the goods and then making sure supervisors are aware of their accomplishments, says Van De Voort. "You have to step up and raise your hand," he says.

Regardless of economic conditions, "you're going to be judged based on performance," says Umesh Ramakrishnan, vice chairman of CTPartners, an executive recruiting firm. IT staffers who hope to land a bonus need "to demonstrate that [they're] not replaceable," he adds.

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Denver-based Catholic Health Initiatives is restricted in handing out bonuses because of its nonprofit status, says technical analyst Chris Ritchie, who works out of the national health care organization's Exton, Pa., office. Still, supervisors there can give out \$250 gift certificates to recognize exceptional individual performances. Ritchie says he appreciated receiving one of those last year after overseeing a systems migration effort.

Ralph T. Wall Jr., a Microsoft Certified Professional, says certification helped

Performance
Year-end/annual
Profit sharing
Team
Project completion
Sign-on
Retention/stay-on
Project milestone
Certification completion/training
Employee referral

him obtain a stipend of 5% of his annual salary as a senior systems analyst for the city of West Palm Beach, Fla. Like most public-sector organizations, the city doesn't offer bonuses, says Wall. But because he has been an employee for more than 20 years, Wall is entitled to longevity pay, which has added another

10% to his base salary.

Patti Henderson, IT director at Givens Pursley LLP, a law firm in Boise, Idaho, says she was pleasantly surprised that the annual performance bonus she received in July was twice as much as what she'd expected. Still, as a one-person IT department, she got quite a bit accomplished in 2007, including the firm's transition to a storage-area network environment.

"It's huge when you're just one person," says Henderson. She attributes her accomplishments to effective time management. "I always pad my timelines and schedules so I don't have to worry about meeting a deadline, and nobody ever has to wait" if an end user needs help with a systems issue, says Henderson. For instance, she blocked out three months to complete the SAN project and ended up completing it two weeks ahead of schedule. ■

3. ARRANGE FLEXTIME

If you're planning to approach your manager about a flexible work schedule, the good news is that your boss may lead you to the punch.

Your employer might impose a four-day workweek or offer telecommuting even before you can volunteer, says Mercer IT workforce specialist David Van De Voort. "The cost of gas has gotten employers' attention," he says.

By year's end, almost one in four employees (22%) will be, for the first time, planning to offer at least some telecommuting the option of a four-day workweek, and slightly

more (24%) are planning to allow more employees to work from home, according to Mercer's Gas Price Impact Simplified Survey, conducted in July 2008. What's more, two-thirds (66%) of responding companies said

they plan to increase mileage reimbursement by up to 20% for business-related travel because of higher gas prices, while 40% anticipate raising car allowances provisions by up to 20%.

The percentage of companies with telecommuting programs for IT staffers has remained about 47% for the past two years, says Lily Melo, an analyst at Gartner Inc. "I don't think there will be a point where everybody

behind additional time off or sabbaticals (41%) as the most desired perk currently not offered by the responding companies.

In doing it, but that number will increase. Certain jobs will never be telecommuted," she says, but the majority of development and analysis work doesn't have to be done in the office.

While the data is encouraging, some industry watchers say adoption will slow.

"The policy practices are mostly behind — mostly because businesses just don't know how to deal with it," says Gartner analyst Diane Hirsh.

— STACY COLLETT

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4. Get The Right Certificate

BY STACY COLLETT

UNCERTAIN economic times have many IT employees nervous about how to stay relevant and valued in their companies — or at future employers if they're forced to leave. One Chicago-area IT manager and infrastructure project leader, who asked that his name not be used, wonders whether it's time to earn a certification that might get him premium pay or at least an edge over other applicants for a new job.

"Do I try to enhance my management skills, or do I dig deeper into the technology?" he asks.

What's more, on his own tight budget, the manager is concerned that the cost of a certification will outweigh the benefits. "[Certification] really doesn't strike me as being beneficial," he says. "A lot of people I've seen with certifications frankly don't know what they're doing."

His dilemma is common, and this year's Salary Survey figures seem to back up his suspicions. Nearly half (49%) of the respondents reported having some type of computer certification, yet 47% said their certifications haven't helped them land a job, earn a promotion or gain a pay raise.

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"It's no longer about certification, except in deeply technical areas like security and networking," explains David Foote, president of Foote Partners LLC, which reports that the average market value of a certification declined 3.5% from July 2007 to July 2008. "Employers want skills any way they can get them, in the right combination, and not simply tech skills, but hard and soft skills."

CIOs and senior managers are now looking for certification programs "that are going to help classify and categorize the value of people for things that matter to the business at hand," says Diana Morello, an analyst at Gartner Inc. "So we're going to see more education and training in financial regulations for people in the financial industry," for example, she says.

IT leaders are also looking at larger-scale educational programs or management disciplines that will yield longer-term value. "Six Sigma, process design and project management discipline issues are going to be where a lot of CIOs and IT leaders are actually focusing," says Morello.

However, there still are a few technical areas in which a certification could yield premium pay, especially network security, project

management and systems architecture, according to Foote. Depending on corporate compensation policies, IT skills premiums are typically incorporated into base salary or paid out as a cash bonus that can be adjusted annually, he says.

The CISSP certification from the International Information Systems Security Certification Consortium Inc. continues to be the gold standard, Foote adds. The (ISC)² now offers three areas of specialization within its security certification — architecture, engineering and management.

IT professionals with systems architecture certifications are also seeing increases in pay or bonuses.

"Companies are realizing that they need, at least in the short term, many different kinds of architects — from the extremely technical to the extremely business-oriented," says Foote, whose firm tracks 20 types of IT architects. "They're the people who really understand what the business needs and how we can use technology to advance or enable that need. Those people are extremely valuable."

Premium pay for a Citrix integration architect certification, for example, reached 11% of base pay in the second quarter of 2008.

If you're still uncertain about the right certification for your career, "follow the money," suggests David Van De Voort, an IT workforce specialist at Mercer in Chicago.

"Find out where your employer is spending money," he says. "Know the business strategy. Know the technology strategy." ■

Collett is a Computerworld contributing writer. Contact her at stcollett@aol.com.

5. MAKE A REFERRAL

Companies may be slowing or even stopping the flow of bonuses — but many are happy to award cash to employees who make successful referrals of job candidates. In fact, many sources contend that these rewards cost less than recruiting and attracting new workers.

Although some referral bonuses are in the low hundreds of dollars, other companies hand out more than \$1,000. In addition,

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some companies offer referring employees into offices and lotteries that promise

prizes such as home entertainment systems, cars and trips overseas. Others double their bonus offers for hard-to-fill technical positions.

At Intrinsic Solutions Group LLC, Managing Director Grant Gordon encourages the consultants he places to make referrals to his Overland Park, Kan.-based staffing firm. In the current economic climate, clients want workers who "can walk in and work," he says. In the near term, "referrals will be more broad and better, since companies don't have the budgets or time for training," Gordon says. Intrinsic offers \$500 to \$1,000 for successful referrals.

But don't regard referrals as a way to make quick cash, warns Claud Fowler, author of *My Job Went to India (And All That Was This Laundry List): 122 Ways to Save Your Job* (Pragmatic Bookshelf, 2008). Referring mediocre people is a sure way to make yourself look less valuable, he says, adding "I wouldn't look there for recommendations I had someone in mind already."

— MARY BRANDEL

6. Go Back To School

BY MARY BRANDEL

THERE'S NO question that the higher the degree, the higher the paycheck. According to this year's Salary Survey, staff and entry-level IT workers with a bachelor's degree earned an average of \$74,768, compared with an average of \$82,101 for those with a master's and \$96,401 for those with a Ph.D. The same applies to midlevel managers, who earned an average of \$90,650 with a bachelor's, \$99,488 with a master's and \$102,861 with a Ph.D.

But considering the high cost of education, most peo-

ple think twice before pursuing an advanced degree. Plus, there's the argument that experience counts more than a piece of paper.

"People often think an MBA will give them a huge leg up, but if you've honed a specific niche skill for five years versus spending five years on a part-time MBA program, you'd get a lot more value coming in with the experience versus the degree," says Grant Gordon, managing director at Intrinsic Solutions Group LLC, a staffing firm in Overland Park, Kan. "I've seen people who think they'll be promoted because they got an MBA, and they get overlooked."

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Not that Gordon is against obtaining advanced degrees; he just doesn't think you should do it solely for the money. "I'm a huge proponent for improving yourself if it's for your own personal development, but if you're looking for a magic bullet to increase your salary, I haven't seen evidence that it's effective," he says.

Michael Godin wasn't thinking salary when he went back to school in 2005, after 10 years in IT. At the time, he was a network administrator, and he moved across the country to obtain a master's in information assurance at Northeastern University in Boston. "The whole idea was to get away from the straight-up, day-to-day technology engineering mind-set and get into the deeper aspects of companies' philosophical approaches to technology," Godin says. "I didn't equate the additional degree with salary advancement."

Today, he's earning 10%

more as a professional services consultant at Ecara Software Corp., a compliance reporting system vendor in Portsmouth, N.H., that was recently acquired by Versata Enterprises Inc. Having a graduate degree, Godin says, "puts you in different social circles and allows you to go after higher-paying jobs."

It enabled Godin to move from engineering to the sales side, which involves talking strategy and giving presentations. "There's a feeling like you've earned your way to being at a specific table; that's where the edge from education comes from," he says.

As for the experience-vs.-degree argument, Godin says that at 33, the degree helped him prove that he was qualified for a higher-level job. "I think experience is just as important," he says. "But at a younger age, when you haven't built up a lot of experience yet, the piece of paper accelerates you." ■

7. MOVE TO A METRO HOT SPOT

All areas of the country are not created equal when it comes to compensation increases. For instance, according to Computerworld's 2008 Salary Survey, total compensation increased more substantially in San Jose (an average of 5.8%), San Francisco (3.2%), Atlanta (4.8%) and Las Vegas (4.7%). But if moving to a higher payroll doesn't appeal to you, consider a place where tech jobs are

growing and where you can stretch your paycheck further.

One such place is Hartford, Conn., where the cost of living is 10% lower than it is in San Francisco, according to

Salary.com Inc.'s cost-of-living wizard, and the average salary is about \$24,000, according to Dice's salary survey. Thomas

Oliver, senior vice president and chief marketing officer at Dice Holdings Inc., says that's close to the national average for IT. Similar dynamics exist in Pittsburgh and Cleveland, he says. Michael Godin, professional services consultant at Ecara Software Corp. in Portsmouth, N.H., offers another example.

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When he moved from Boston to Portsmouth in 2007, he saw his cost of living decrease 5%.

Another area to consider is Seattle, where tech jobs are up 7% year over year and the average salary is 9% higher than the national average, Oliver says.

"The message is to consider smaller markets where your dollar can go further," he says. "Even though there are fewer jobs in these areas because the markets themselves are smaller, the number of jobs is growing." Compare that to Silicon Valley, which offers the highest salaries but where the IT job count is down 12%, Oliver says.

Considering today's housing market, many homeowners will

San Jose
and San Diego

San Francisco
, Atlanta

Washington, D.C. and Las
Vegas

Pittsburgh
Dallas and
Chicago
Detroit
New York

likely be loath to pull up their roots, however, says Grant Gordon, managing director of Intrinsic Solutions Group. "People are wary of moving because it's hard to sell their home, not to mention the cost of moving," he says.

— MARY BRANDEL

8. Switch Industries

BY THOMAS HOFFMAN

As a programmer at Michigan State University Federal Credit Union, Mark Rathwell spends most of his time working with a proprietary scripting language. Problem is, he gets bored with his day-to-day work. Rathwell says he would like to become more involved with other languages he has learned during his six-year career at the East Lansing, Mich.-based financial institution, including C, C#, Java, PHP and Perl.

That's one of the reasons why Rathwell is in the process of creating his own IT consulting firm, where he can take on a variety of customers and help them address a mix of technical and business challenges.

"Realistically, it's the best opportunity for me to see new stuff and try new things on a regular basis," says Rathwell, who has already landed an online banking software company as a client. As a consultant, he says, "I can jump from industry to industry."

While striking out on your own isn't the right move for everyone, one option for IT professionals who are looking for a change — and more money — is to make the leap into a higher-paying industry. According to this year's Salary Survey results, the construction and engineer-

ing industries offer the highest average pay increases (4.9%) across the two-dozen industries represented in the study. Business services/consulting (4.4%), defense/aerospace (4.4%) and entertainment/marketing (4.3%) also offer compensation increases that are higher than the average 3.5%.

There's strong demand for IT professionals in both the energy and health care industries, says Katherine Spencer Lee, executive director of Robert Half Technology. There are also opportunities for IT workers at law

9. GET A BRAND-NEW JOB

An Ohio-based business continuity manager who asked to remain anonymous says he earned a whopping 20% pay raise when he moved from one insurance company to another in June. "I landed into a situation where they needed the skills that I have," he says. Indeed, big moves can yield big pay increases, but make sure you're seeing the whole employment picture.

This year's salary survey shows at least one short-term benefit to making a move: Respondents who reported taking on a new job in

firms and corporate legal departments, which are storing ever-increasing volumes of data to meet regulatory requirements, says Spencer Lee.

Still, she recommends that IT professionals do research on each of the industries they're considering and examine whether their skills are a good fit. That process can include using online search engines to learn about industry trends, attending user group meetings for IT professionals in a particular sector, and picking the brains of friends and peers who work in other business domains, says Spencer Lee.

Tisa Knight-Chandler likes the idea of working for her local city — in this case, Suffolk, Va., where she's been a network coordinator for the past year. But Knight-Chandler says she's fairly certain that

the past year had an average total compensation change of 10.3%, compared with an average change of 3.3% for all respondents.

What's more, the last hired isn't necessarily the first fired during cutbacks anymore, says David Van De Voort, an IT workforce specialist at Mercer.

"Over the last five to 10 years, I've dealt with a lot of organizations that have had to cut back," he says. "For someone recently hired from the outside as a specialist earning \$60,000 to \$80,000, the likelihood of getting hit by a [reduction in force] is less than for someone who has been on the payroll for a long time." That's usually because the

she'll have to pursue a job in the private sector if she's going to have any chance at increasing her income and moving into a supervisory role after earning her master's degree in information systems from Strayer University in nearby Virginia Beach.

Within the city's IT organization, "everything is based on 'this person has been here for 20 years' and 'this person is going to be the next director,'" says Knight-Chandler. "So I don't see the opportunity for moving up in the IT department [here]."

She also recognizes the trade-offs that a move to the private sector might entail. "There are lots of good things about working in the private sector, like making more money," says Knight-Chandler. "But in the public sector, if I need to leave work to pick up one of my kids from school, I can do that." ■

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never hires' skills have been validated more recently than those of longtime employees. But before jumping ship, "any professional needs to consider up about the consequences that are going on in terms of how their business is being affected by the economic issues," says Garberon analyst Diane Merello. "If the economy is healthy and consumers are spending money, 'Then jumping from one company to the next and assuming you're going to get something better might be applicable.' But in an uncertain economy, though, 'the closer your industry is to the center of this, the less you can assume that jumping ship is going to be effective.'"

— STACY COLLETT



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10. Jump a Level

BY MARY BRANDEL

THE traditional way of increasing your earning power is to work toward a promotion. In fact, data from Computerworld's 2008 Salary Survey supports this idea: Midlevel managers received a median annual base salary of \$90,000, compared with \$72,450 for rank-and-file and entry-level workers. Similarly, systems analysts earned \$65,432 in total compensation in 2008, while senior systems analysts earned \$84,882. And respondents who reported receiving a promotion in the past year saw their total compensation rise 6.7%, compared with the average increase of 3.9%.

But in this economic climate, companies are more prone to adding responsibilities to your current role while maintaining the lower pay grade and job title, says Grant Gordon, managing director of Intronic Solutions Group LLC, a staffing firm in Overland Park, Kan. "There are very few promotions going on," he says. "Employers are holding on to their pennies versus focusing on growth and development."

As a result, the best way to jump to that next level might be to recast yourself by redefining the value you add to your company, says Chad Fowler, author of *My Job Went to India (And All I Got Was This Lousy Book): 52 Ways to Save Your Job*. IT employees should shift their focus to "not staying average," he says.

What you want is to become highly valuable and sought-after by achieving what he calls "remarkable status."

For instance, you can make yourself stand out by taking on a special project, writing articles, speaking at conferences, becoming a recognized expert in something the company does — either technologically or industry-wise — and otherwise rais-



ing your profile. You can start on a small scale by forming a local technology user group, for instance, Fowler says.

"You can incrementally improve your salary by making incremental improvements, but these things allow you to jump outside your current level of performance," Fowler says. "And almost nobody is doing this, which almost makes it easy to be recog-

nized for doing it."

Another way to stand out from most IT people, he says, is to become fluent in a market your company focuses on. "That would mean clients outside of IT would find you remarkable because you understand the terminology they use and you have your own ideas for improving the business," Fowler says.

Your focus shouldn't be on your salary, he notes.

"Ultimately, if all you want is a higher salary, you won't get it. If you focus too much on money, you're not likely to have the passion and energy required to really differentiate yourself." ■

11. BE A TOP PERFORMER

"The devil you know" may be your best option for a raise, says David Van De Voert, an IT workforce specialist at Mercer. Changing positions — and changing departments, especially — within your company can increase your salary.

"Shape yourself to your employer's needs. If there's no strategy department, find out where your employer is spending money," says Van De Voert. "This tells what is important to your employer."

Human resources professionals acknowledge that employees who change jobs often see their pay rise more quickly and that a longer tenure can mean slower pay growth. But sometimes a long-term relationship holds greater benefits than a hefty pay raise at another company.

If you're an average performer at your company,

expect an average annual raise of 3% to 3.5%. But if you're a top performer, you're likely to earn more — sometimes more than people hired from the outside. "We always caution our clients that when the money is tight, make sure you take care of your top performers," says Mercer analyst Lily Mat. Job hoppers often want to negotiate good increases from their previous jobs, as they sometimes end up above the regular salary grade and don't get the same adver-

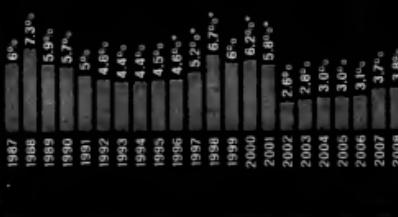


quent raises as others. But if they're top performers, companies often offer lump-sum bonuses rather than increases in base pay, says Mat.

And loyalty has other rewards. "My company places a very high value on what I'm doing. If economic times called for cutbacks, it wouldn't be me," says one business continuity manager, who asked that his name not be used. "But even if that happened, I'm pretty confident that I would be working somewhere tomorrow."

— STACY COLLETT

The last 20-plus years have had periods of highs and lows for IT salary increases



12. Get a Hot Job

BY THOMAS HOFFMAN

IT'S NOT EASY for IT professionals to make a wholesale switch to a different technical discipline to reap the benefits of a hot skills market — say, moving from a job as a systems administrator to a Java developer. "It's very difficult, because those two things just don't go together," says Katherine Spencer Lee, executive director of Robert Half Technology.

But that's not to say it can't be done, say Spencer Lee and other IT labor experts. For example, a systems or network administrator could take online or classroom courses to hone his Web development and systems life-cycle management know-how.

"If you can go to a supervisor and say, 'I'd like to move into a Web development role, I've learned some PHP, AJAX and other skills,' employers are interested in hearing from

people who have shown that type of initiative," says Spencer Lee.

In fact, Web-related skills were among those garnering higher-than-average pay raises in this year's salary survey. Other hot skills included security and data management (see chart at right).

Given current cost constraints, most employers have fewer resources available than they once did to retain IT workers in different technical fields, says David Van De Voort, an IT workforce specialist at Mercer.

Still, there are opportunities for go-getters who are interested in reinventing themselves for potentially higher-paying roles. For instance, IT staffers who work for the city of Suffolk, Va., can pursue three technical certifications of their choice each year and receive 75% reimbursement "with no questions asked," says Tisa Knight-Chandler,

THIS STRATEGY COULD HELP A LOT



a network coordinator there. Knight-Chandler has taken advantage of the program this year by upgrading her Microsoft Certified Systems Engineer 2000 certification to an MCSE 2003. She's also pursuing a master's degree in information systems.

Of course, providing IT staffers with training opportunities can be a double-edged sword for employers. On the plus side, a well-rounded technical staff with enhanced knowledge in various disciplines can provide better support. They can also provide IT managers with a deeper bench if an IT specialist goes out sick or has to be temporarily reassigned to another area.

On the other hand, as IT workers become more knowledgeable, they also become more marketable.

Until recently, Tim Watkins was an application support supervisor at Dantom Systems Inc., a Wixom, Mich.-based provider of services to the credit and collection industry. Through the company's generous training program, Watkins took courses to bolster his supervisory, project management and VMware skills. In addition, Dantom reimbursed him for part of his tuition for an MBA from nearby Walsh College.

But Watkins says he was disappointed when he received a 3% raise earlier this

year, particularly after he felt he'd gone above and beyond his job responsibilities by creating, documenting and testing a disaster recovery plan for the company's customer data collection system.

"I understand the national averages on IT pay, but that goes to the economics of companies," says Watkins. "Most companies are downsizing, but [Dantom Systems] is thriving right now. They're having their best year ever."

Watkins says he was recently contacted through one of his LinkedIn connections about an opportunity to become a senior systems analyst at a Detroit-area law firm. After interviewing for the position and receiving an offer, he decided to take the job, since it included a 20% salary increase and good benefits, including profit sharing after two years of employment. ■

HOW WE CONDUCTED THE SURVEY

Computerworld's 22nd Annual Salary Survey was administered via the Internet. Responses

came from both Computerworld print subscribers and visitors to Computerworld.com who indicated in the survey results.

The collection of survey data began on May 25, 2008, and concluded on July 25. A total of 7,272 people responded to the

survey. Of those respondents, 6,061 were employed full or part time and were eligible to complete the entire survey.

At the 95% confidence level, the margin of error for this sample size is +/- 2.2 percentage points. Compensation figures

for 2007 were calculated based on the percentage change reported by the respondents.

For calculator
links, visit www.computerworld.com/salarycalculator.htm or www.computerworld.com/salarycalculator.htm?db=sa.

John McKee



Sit Tight or Jump Ship?

IT'S THE AGE-OLD CYCLE: When the economy heads down, job anxiety kicks up. So here's the question: Is the smart career play to wait it out or dust off your résumé and start looking elsewhere?

As a career and executive coach, I've been asked this question quite often lately. And with so many companies now

"right-sizing" and well-known organizations disappearing weekly from the marketplace, this isn't a time to simply sit back and manage your career on a wing and a prayer.

While there's no answer that's right for everyone in every situation, there's no doubt that your current compensation will play a big role in helping you make the decision about whether to stay where you are or look for greener pastures.

Tools like *Computerworld's* annual salary survey can help you consider your existing situation and job alternatives.

For example, if your organization is telling you that it simply has no budget for raises (again) this year, but you see that 73% of survey respondents received one, what does that tell you? Conversely, if you've just been given a

bonus that was larger than last year's, when 85% of survey respondents said their bonuses were the same or smaller, then your existing employer might seem a little better than it did mere minutes before.

The survey is also valuable if you're wondering about your current role. Job titles with the biggest gains in compensation are a clear sign of growth opportunities. If you're in an area that seems hard-pressed to get enough funding for the job to be done adequately and your pay isn't keeping pace with inflation, I'd say it's time to consider a career upgrade.

Many times, those types

■ This isn't a time to simply sit back and manage your career on a wing and a prayer.

of changes can't be accomplished at your current employer. Quite simply, if the bosses regard you as suited to one particular role, it's often impossible to "re-engineer" yourself for consideration in other areas. If you want to get ahead, you might have to go to another company where you're not pigeonholed.

This survey also provokes thought about changing industries as well as job roles. Keep in mind that the average worker today will probably make at least five major career moves; younger workers will make as many as eight major career moves over their working lives. If they work for 40 years, that's only about five years per job. So it's likely that you aren't going to stay where you are for an extended period of time.

A few of the reasons for

such frequent changes are related to company life cycles — start-ups are appearing with ever-greater frequency, but established companies seem to be disappearing just as quickly. Other causes include the fact that more families have two working partners (increasing the potential for relocation) and the shift to a world economy, which affects entire industries.

I don't advocate anyone changing employers solely for money. While it never takes long to get accustomed to the new paycheck, it's the job itself that you face every day and that will either charge you up or grind you down. But more compensation with a more interesting job and a great employer is a match made in heaven — and these opportunities do exist, even in a down economy.

My advice is that you should dip your toe in the water at least once a year to see what's out there and how it compares with your existing job. Otherwise, you risk becoming stale, which will affect not just your job performance but your personal life, too. Because usually, if you're not having fun inside of work, you're not having fun outside of work either. ■

John McKee, founder and president of *Business SuccessCoach.net*, is the author of *Career Wisdom: 101 Proven Strategies to Ensure Workplace Success*. He can be reached at john@businesssuccesscoach.net.

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More than 300 business executives were asked, "What is your staff's reaction to recent economic changes?"



SOURCE: THE OMNIA GROUP INC. SURVEY SEPTEMBER 2008



Disengaged

When it comes to employee engagement, IT professionals are at the bottom of the pack.



Greater clarity about what the organization needs me to do, and why.

27%

More resources.

20%

Better communication with my manager.

20%

12%

9%

6%

5%

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BY THOMAS HOFFMAN

CAMPUS WATCH

A Focus on IT Leaders

BY THOMAS HOFFMAN

Techno-MBA degrees for CIOs are nothing new. As the CIO role has evolved, such programs have entered the curricula of several U.S. universities and even become "a path to the CEO" post, says Andres Fortino, associate provost at the Polytechnic Institute of New York University.

Now, NYU is working with a number of organizations, including the state of New York and the United Nations, to craft a similar degree program for chief information security officers. Fortino says. This spring, Polytechnic will launch a two-year, part-time master's degree program for CISOs. The school is working on developing an accreditation process for the 30-to-36-credit program with the New York State Office of Cyber Security & Critical Infrastructure Coordination.

As for the techno-MBA for CIOs, Polytechnic added course offerings this fall, says Fortino. One addition focuses on optimizing and building

"world-class, green data centers," he says. These and other courses will also be offered to aspiring IT leaders who attend IT management conferences organized by AIT Global Inc., a Kings Park, N.Y.-based consultancy.

The first of the weeklong master's degree courses will be introduced at an AIT-sponsored conference in New York on Nov. 11, said AIT Global President Mike Lackey. Subjects covered will include service-oriented architectures and developing environmentally sustainable data centers. Another topic of discussion will be the changing role of the CIO, including a look at setting strategy for the enterprise and leading innovation efforts.

Fortino said he hopes to attract roughly 30 up-and-coming IT leaders to the joint Polytechnic/AIT Global courses this month. To learn more about the programs and course offerings, contact Fortino at aforfino@poly.edu.

Bright Spots

Cities that saw the largest increase in tech job postings in the first 8 months of 2008 over the same period in 2007.

1	36%	6	14%
2	—	7	—
3	22%	8	12%
4	—	9	—
5	21%	10	9%

SOURCE: DICE.COM JOB POSTINGS

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Applications Developer

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TRUE TALES OF IT LIFE AS TOLD TO SHARKY

Certifiable

This IT pilot fish's wife moves to a new classroom at the school where she teaches, and she wants her desk to be in a different spot than where the network jack is. Fortunately, there's a wireless hub in the room. "Come to find out that the wireless is dead and a service call had been placed at the district level to fix it," fish says. His solution: Move the desk and run a temporary network cable from the current jack up to the dropped ceiling, across and then down to her desk. Flash forward two months to when the school's tech finally shows up. "She sees the temporary solution and goes berserk," says fish. "My wife is told to

immediately stop using the Cat 5 cable that I wired up. The reason: Unless a 'certified' cable is used, it would void the warranty on her two-year-old MacBook. It is now one month later, the wireless is still not working, and IT has not provided a 'certified' Cat cable. And the 'noncertified' cable? It's still in use. I wonder if we should let IT know about the home network that she connects to at night."

Inconceivable

Eight-months-pregnant pilot fish finally manages to get her boss to understand something: "I was the only one on his team who was supporting a particularly important computer system," grumbles

fish. "So he asked me to write down everything I did to support that system, and he would give my documentation to someone else to do while I was gone. When I told him that everything routine had already been documented and that the part I was concerned about was the user problems that couldn't be predicted, he told me to document those, too. I told him I couldn't, because they were different from day to day, often involving elaborate troubleshooting and rarely duplicated. But that didn't seem to deter him. And he seemed particularly miffed when I told him that I had no intention of wearing my pager when I was in the hospital having my baby."

question. "Hey," asks one, "can you tell me what the DOS thing is? We keep hearing about it, but no one tells us anything." Sure, says fish. DOS gives people a way to talk to the computer and give it instructions. It's a language using English words so you don't have to input a bunch of zeroes and ones. "Whaaa?" says the employee, but his companion quickly jumps in: "He said it's English for the computer." "Well," asks the first one, "why didn't he just say that?"

■ Just tell *Sharky* your true tale of IT life. Send it to me at sharky@computerworld.com, and I'll send you a stylish *Shark* shirt if I use it.

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Grass-roots IT

I WORKED ON MY FIRST local political campaign when I was 16, and it left a mark. Ever since then, I've never thought of politics as a spectator sport. So watching Barack Obama over the past two years as he went from underrated wunderkind to president-elect, it was clear to me how he'd succeeded. The key, it seemed obvious, was his huge army of volunteers.

There's a lesson here for IT. But first, a little politics.

Conventional wisdom today says that an old-style political organization is obsolete. Nowadays, you're not supposed to flood the streets with volunteers knocking on doors and passing out leaflets. Instead, you raise lots of money from big backers and use it to flood the airwaves with TV commercials and the phone lines with robocalls.

No big backers? No money. No TV spots or robocalls? You're out of the race.

But Obama cut his political teeth in Chicago when knocking on doors was still the way it was done, both by the infamous Democratic machine and by independent candidates who opposed it. Even candidates without fat-cat money could put up a pretty good fight if they had enough volunteers to work the neighborhoods.

And there are advan-

tages to using warm bodies instead of TV sets to spread the word about a politician. A TV commercial is gone in 30 flickering seconds. Actual human volunteers are a lot more memorable. They show their enthusiasm and respond to questions. They talk up the candidate to friends, family, neighbors and strangers. They recruit more volunteers, drum up donations, register new voters and report problems back to campaign headquarters.

They become personally invested — it's not just some politician's campaign, it's *their* campaign. And on Election Day, they

■ You can't get millions of volunteers — but you can recruit a small army of users in the business units you serve.

vote. TV commercials and robocalls don't.

There's more than that to a campaign, of course. For Obama, eventually there was fat-cat money and TV time, along with innovative use of the Internet. But from the start, Obama's big advantage was his grass-roots army of millions of local volunteers who were actively engaged, not watching from the sidelines.

Wouldn't you like to have that kind of advantage for your IT projects? Especially now, when business conditions are lousy, money is hard to come by, and there's no margin for error?

You can, sort of. You can't get millions of volunteers — but you can recruit a small army of users in the business units you serve.

They won't knock on doors for you. But from the start, they can help

define projects, promote them and keep them on track to success.

These are people who know the real requirements of any project that will touch them. They can help you identify problems that need solving — and projects you can complete quickly, with big impact and high ROI.

They can also talk up your projects with their co-workers and managers, give you early warning when needs change or support fades, and generally serve as your eyes and ears on the business side. In short, they can work to make your project a success in every way.

And they will, especially if they feel like it's their project, too.

Yes, you'll still have to campaign for project budgets and resources. You'll need the support of the fat cats — your CEO, your CFO and other non-IT executives and managers. But that's a lot easier to get for projects that are fine-tuned, user-focused and practically guaranteed to be successful.

As for users — well, once they've worked on one of *their* IT projects, they'll never see IT as a spectator sport again. ■

Frank Hayes is Computerworld's senior news columnist. Contact him at frank_hayes@computerworld.com.



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